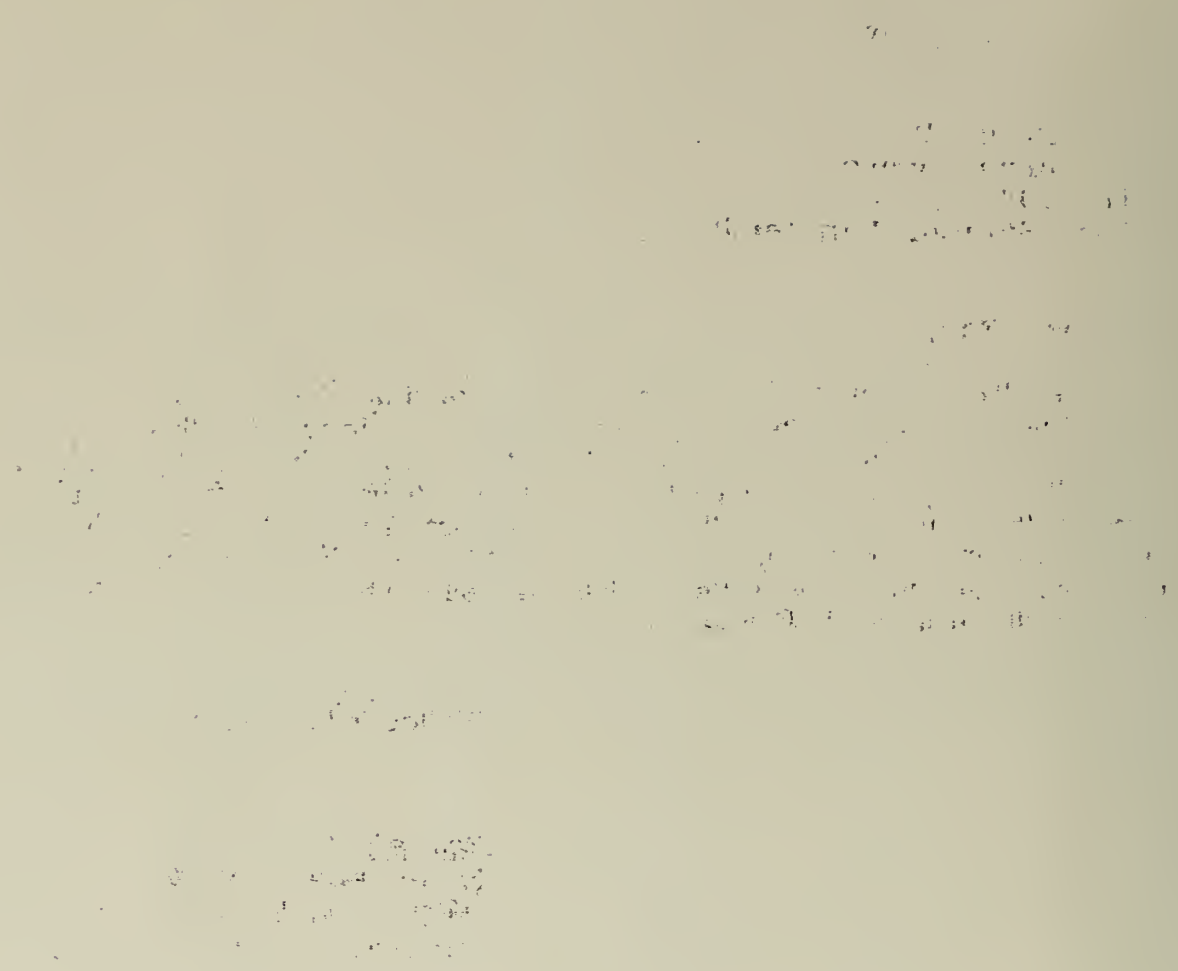
The Health of Minorities in Rhode Island

Office of Health Statistics
Rhode Island Department of Health

Bruce Sundlun
Governor

Barbara A. DeBuono, MD, MPH
Director of Health



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF HEALTH

Barbara A. DeBuono, M.D., M.P.H.
Director of Health

May 14, 1993

Dear Friends:

It is my pleasure to send you this report on The Health of Minorities in Rhode Island.

Most of us already know that there is a distressingly wide, and in some cases, growing gap in health status between people of color and the white population. In Rhode Island, as elsewhere, the incidence of heart disease, cancer, strokes, and diabetes are all rising for people of color, and homicide is now a leading cause of death for African-American males. One of the overarching goals of *Healthy People 2000: the Year 2000 Health Objectives* is to reduce the health disparities among populations.

The goal of this document is to provide the health indicators and patterns of health behavior and health care utilization which will help us assess the health status of Rhode Island's diverse population. Working in conjunction with the Department of Health's Minority Health Advisory Committee, our Office of Minority Health will use this baseline report as a foundation for a state plan aimed at narrowing that gap, and addressing the health concerns of African-American, Hispanic, Native American, Southeast Asian, and other communities of color.

All of Rhode Island has a major stake in improving the health status of people of color. I hope that you find *The Health of Minorities in Rhode Island* to be an informative and thought-provoking statement of where Rhode Island stands as we continue our efforts to improve the health of all populations.

Sincerely,

Barbara DeBuono

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Director of Health

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THE HEALTH OF MINORITIES IN RHODE ISLAND

Report to
The Minority Health Advisory Committee

May 1993

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TABLE OF CONTENTS

MINORITY HEALTH ADVISORY COMMITTEE
RHODE ISLAND DEPARTMENT OF HEALTH

Terry Addison	Brother to Brother
Melvin Bell	Rhode Island Foundation
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Executive Summary

Healthy People 2000, the report on the Nation's Health Objectives for the Year 2000, proposes that the Nation commit to the attainment of three broad goals:

Increase the span of healthy life for Americans
Reduce health disparities among Americans
Achieve access to preventive services for all Americans

This report addresses the second of these three goals by delineating the extent of the health disparities experienced by members of minority groups in Rhode Island. These disparities are many, and they exist throughout the areas of health status, health risk behavior, and access to health care.

Among the findings of this report, several patterns stand out. Black residents experience higher mortality rates for nine of the ten leading causes of death in the state; in particular, their risk for homicide is over six times that for White residents, and their risk for death from diabetes is over three times that for Whites. Many Black and Asian mothers and infants experience a constellation of health effects including inadequate prenatal care, high rates of low birthweight infants, and increased risk of infant mortality. Black teenagers have higher rates of live births and induced abortions than their White counterparts. Morbidity from devastating communicable diseases, including AIDS, tuberculosis, and hepatitis B, strikes members of minority groups at disproportionately high rates.

Minority populations are placed at higher risk of poor health by some patterns of behavior related to long-term health. Smoking rates for Blacks and Hispanics are higher than for other Rhode Islanders, and their rates of quitting smoking are lower. Smoking rates are especially elevated for Black and Hispanic females. Rhode Island's Black and Hispanic populations also exhibit higher likelihood of being overweight than exist in other groups. Finally, Black and Hispanic women are least likely to have been screened for breast cancer by having a mammogram within the past two years, and Black women are least likely to have been screened for cervical cancer by having a Pap smear in the past two years.

Differential access to health care among population groups also appears to place minority groups at a disadvantage in selected respects. All minority children are less likely to have had a dental visit within the past year, including routine preventive visits. The proportions of minority group members without coverage for health care costs are much higher than for the White, non-Hispanic group, and more minority residents are covered by government programs where the participation of providers may be limited.

Taken together, the weight of the disparities documented by this report leaves Rhode Island's minority residents facing excess and unnecessary risk for morbidity, mortality, and disability. This situation presents a major challenge to Rhode Island's public health and health care systems.

Introduction

By nearly every available measure, the members of minority groups in Rhode Island have poorer health expectations than do White, non-Hispanic residents. Minority groups have elevated risks for morbidity and mortality due to vaccine-preventable diseases, chronic diseases, intentional and unintentional injuries, inadequate prenatal care, and lifestyle factors such as smoking, alcohol consumption, inadequate diet, and lack of exercise.

The poorer health expectations of minority groups in Rhode Island can be attributed to socio-cultural and financial barriers to adequate health care, to environmental factors, and to individual health-risk related behaviors. In 1987, the Rhode Island Department of Health initiated a number of activities aimed at reducing health disparities between the state's minority and white populations. These initiatives include: data-based assessment of minority health; initiation of improved methods for the assessment and tracking of minority health; improving dialogue between representatives of minority communities in Rhode Island and the Rhode Island Department of Health; establishing advisory task forces on minority health and on minority AIDS; hiring a minority health coordinator to facilitate minority related activities between the health department and minority communities; developing a minority health promotion plan; launching several federally funded minority health programs; and incorporating minority concerns into Rhode Island's Year 2000 Health Objectives.

Historically Rhode Island's minority population comprised no more than 5% of the state's population. However, demographic trends over the past decade have increased the number of minorities in Rhode Island to above 10% of the population. The rapid expansion of the minority population in Rhode Island and the health disparities experienced by minorities have made it increasingly important for the Department of Health to address minority health issues.

This report presents currently available data on the health status, health-related behavior, and health care access of Rhode Island's minority population. The data have been derived from a variety of sources including vital statistics, health survey data, and census data. They reflect the particular characteristics of Rhode Island's minority population and the limitations of the health data available for this group.

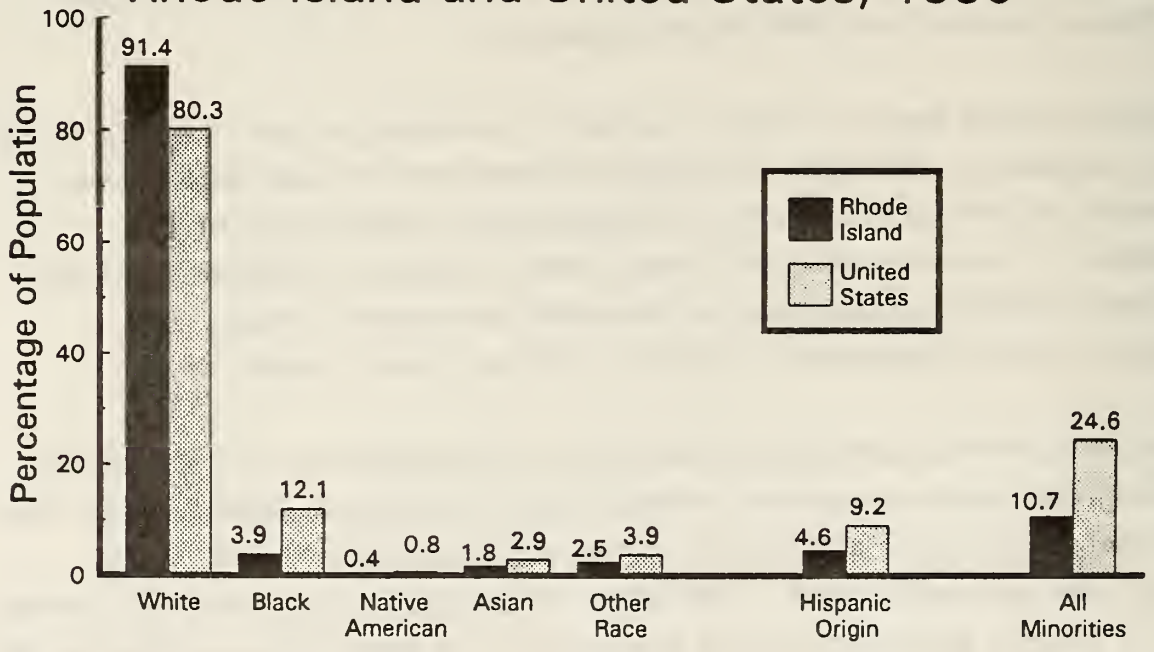
Rhode Island's Minority Populations

According to the 1990 United States Census, 10.7 percent of Rhode Island's 1,003,464 residents are members of minority groups, compared with nearly one quarter (24.6%) of the national population belonging to minority racial or ethnic groups (Table P1). [Note: Tables appear at the end of this report. Figures are interspersed with the text.]

In Rhode Island, 3.9 percent of the population are Black, 1.8 percent are Asian or Pacific Islander (hereafter referred to as Asians), and 0.4 percent are American Indian, Eskimo, or Aleut (hereafter referred to as Native Americans); 2.5% identify themselves as belonging to some other race ("Other"). In addition, 4.6% of Rhode Islanders of all races identify themselves as being of Hispanic Origin (Table P1 and Figure 1).

Southeast Asian populations (Vietnamese, Cambodian, Hmong, Laotian, and Thai) comprise 44% of the Asian grouping and just under 1% of the total population of the state. Cambodians and Laotians are the single largest Southeast Asian sub-

Figure 1. Population by Race and Hispanic Origin
Rhode Island and United States, 1990



groups. Chinese, Asian Indian, and Filipino comprise the other largest categories of Asians. Virtually all (97.9%) Rhode Island residents in the American Indian, Eskimo, and Aleut grouping are categorized as American Indians (Table P2).

The 45,752 Rhode Islanders who characterize themselves as being of Hispanic Origin comprise 4.6% of the total population. By race, Hispanic Rhode Islanders are White (46.5%), Black (10.0%), or Other[1] (40.9%) (Table P3).

Twenty-eight percent (28%) of Rhode Island's Hispanic residents originate from Puerto Rico; 64% originate from South and Central American countries other than Mexico and Cuba. Nationally, most persons of Hispanic Origin come from Puerto Rico, Mexico, or Cuba (Table P4).

Although the minority proportion of Rhode Island's population is smaller than it is nationally, it reflects national trends in its rapid growth over the last decade. Between 1980 and 1990 Rhode Island experienced the greatest percentage increase of any state in its Asian population (246%) and in its Hispanic Origin population (132%). Other minority groups have also grown dramatically (40% or more), while the White, non-Hispanic population has grown only by about 2% (Figure 2 and Table P5).

The majority of Rhode Island's minority populations reside in a small number of the state's cities and towns (Table P6). Four out of five Black residents live in Providence, Pawtucket, Newport, or East Providence; four out of five Hispanic residents live in Providence, Pawtucket, Central Falls, or Cranston. Providence, the state's largest city, has the largest number of every minority group and over one-third (35.5%) of Providence residents are minority members. Concentrations of Asians are also found in Cranston and Woonsocket while American Indians outside of Providence are clustered in the towns of Washington County.

[Note: In the remainder of the report, information is presented whenever possible by the following race/ethnicity categories, consistent with the categories used with the 1990 United States Census: White Hispanic; White non-Hispanic; Black;

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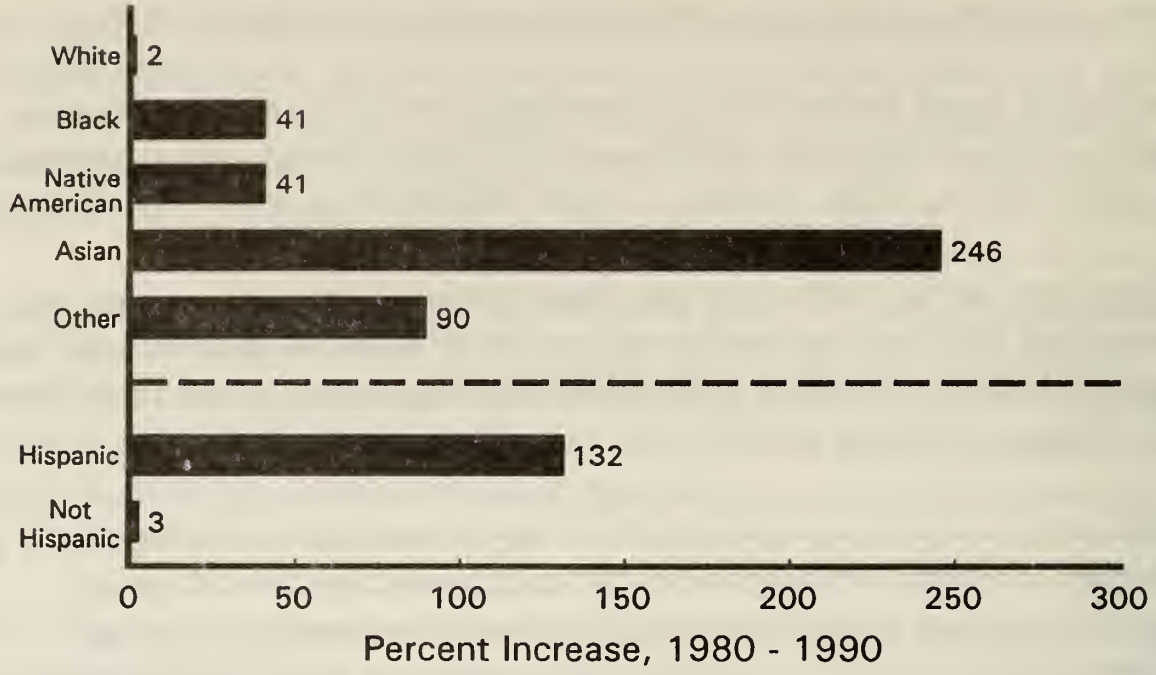
[1] The race category "Other" is used for Census respondents who identify their race by a term that does not fall within the four major racial groups. Follow-up studies at the national level indicate that many of these people are White Hispanics who give their ethnicity (Hispanic) rather than their race (White) in response to the Census question on race.

Figure 2. Population Increase, by Race/Ethnicity Rhode Island, 1980 - 1990



Asian and Pacific Islander; Native American; Other. The small numbers of events in the latter categories sometimes require that they be grouped. When information on Hispanic Origin is not available from the data source used, information for Hispanic Whites and non-Hispanic Whites is combined and labeled "Whites."]

Mortality

Mortality comparisons by race and ethnicity for Rhode Island are limited to comparisons of Black and White mortality. This limitation is due primarily to the relatively small size of most minority populations in the state and secondarily to the limited information on race and ethnicity available in Rhode Island's Vital Statistics data system. Prior to 1989, only the decedent's race was recorded on Rhode Island death certificates. After January 1989 all death certificates were required to specify whether or not the decedent was of Hispanic Origin. There has not been sufficient time since this new reporting requirement became effective to allow an analysis of mortality data by race and Hispanic Origin. Consequently, only Black and White mortality data are compared here for the period 1984 through 1988. Statewide age-adjusted mortality rates for Blacks and Whites were computed for all causes of death taken together and individually for the ten leading causes of death.[2]

To compare Black with White mortality during the five-year period 1984-1988, mortality ratios for the ten leading causes were computed by dividing the Black rate by the White rate. For deaths from all causes taken together, Black mortality in Rhode Island was 45% higher than White mortality. Blacks had the highest excess mortality for deaths due to homicide, with a rate over six times higher than the White rate; Blacks had the lowest excess mortality due to chronic obstructive pulmonary disease (COPD) with a rate 10% higher than the White rate. Suicide is the only cause of death for which the Black rate is lower than the rate for Whites (Table M1 and Figure 3).

Overall, mortality rates for Black males are much higher than those for Black females, but both groups show large excesses in mortality relative to their White counterparts. The excesses in mortality from cerebrovascular disease (stroke) and liver disease are greater for Black females than for Black males, but Black males experience greater excess mortality from COPD, diabetes, suicide, and homicide (Table M2).

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[2] The calculation of age-adjusted average annual mortality rates for White and Black Rhode Islanders is based on: (1) five-year age groups from 0 through 84 years of age, and 85 years and older; (2) Rhode Island population estimates by age, sex, and race for the period 1984-88; and (3) the 1970 United States population distribution as a reference population. The process of age-adjustment assures that differences in Black and White mortality are measured independently of differences in the age structure of the two populations.

Figure 3. Percentage Difference in Black Mortality Rate Relative to White Mortality Rate, Leading Causes of Death, Rhode Island, 1984-88 Average

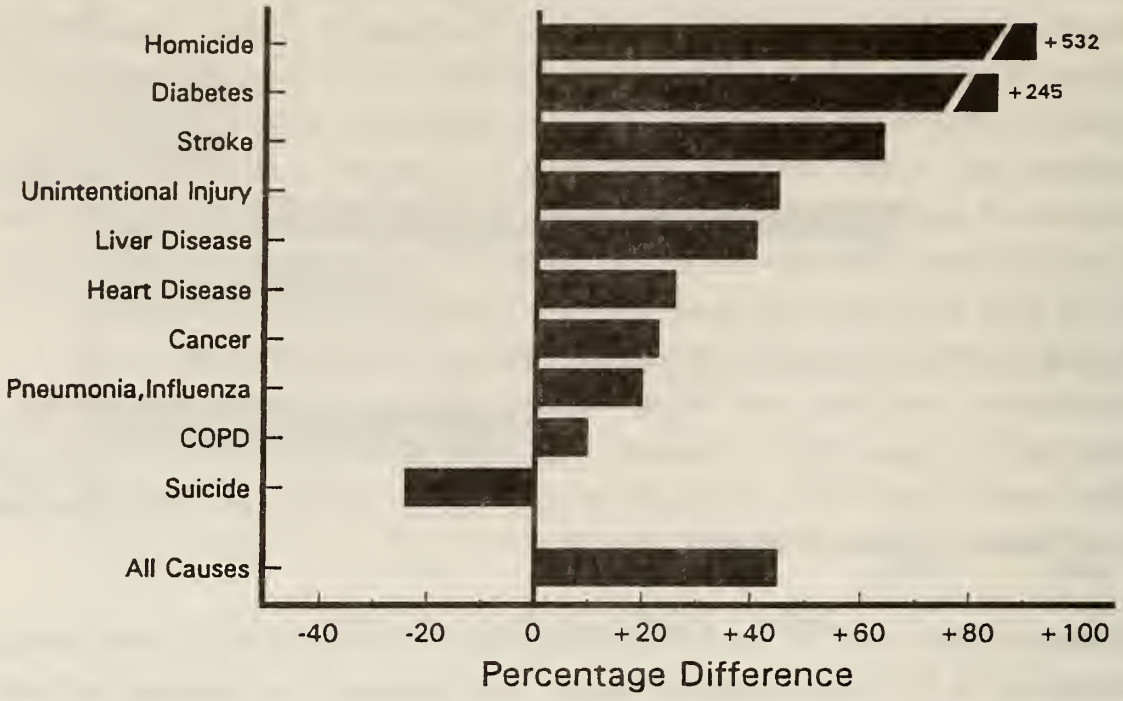
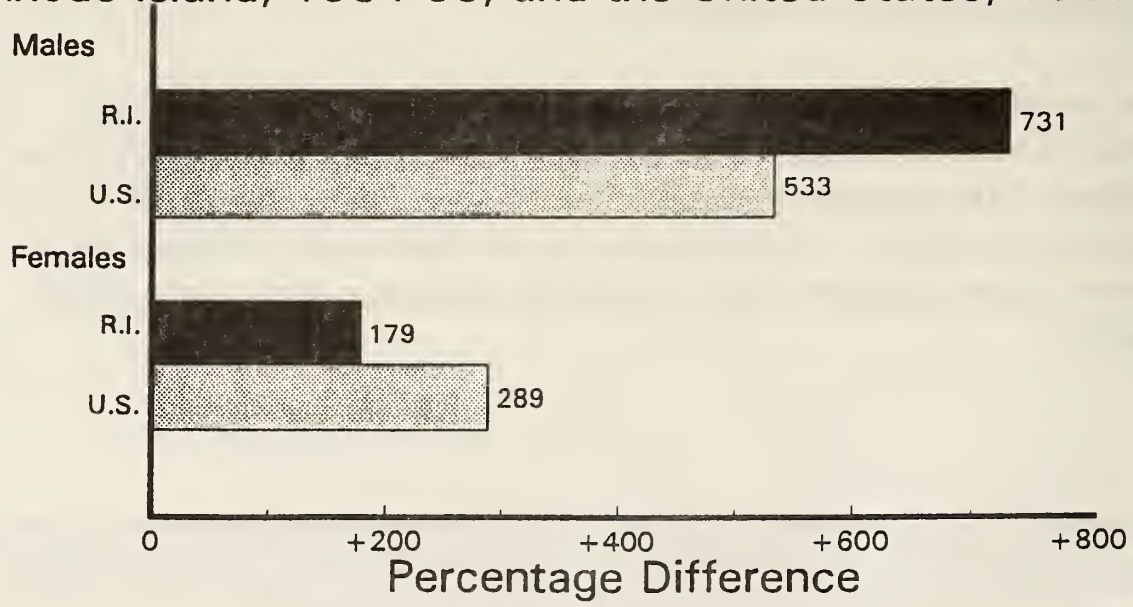


Figure 4. Percentage Difference in Homicide Rates for Blacks vs. Whites, by Sex, Rhode Island, 1984-88, and the United States, 1986



Black/White mortality ratios for all causes combined are slightly higher in Rhode Island than they are nationally.[3] For specific causes, there is some variation from the overall ratio -- the male cancer rate for Blacks in Rhode Island is marginally lower than it is nationally; the higher stroke death rate for females in Rhode Island is reversed in the national data, where Black males have a slightly higher ratio for stroke than Black females; Black male Rhode Islanders show more extreme elevations for mortality from homicide than their national counterparts while Black females have lower mortality due to homicide than they do nationally (Table M2 and Figure 4).

[3] The comparison uses 1986 national data and is limited to causes of death where national data are available and have been computed in the same way.

Natality

Information on pregnancies and births in Rhode Island by race and Hispanic Origin is available from Rhode Island Vital Statistics. Recorded events include births to Rhode Island residents and fetal deaths (induced and spontaneous) occurring in Rhode Island. Infant mortality is determined from Rhode Island death certificates.

Birth and fetal death records are subject to the same limitations described above for death certificates (i.e., small numbers of events for minorities and insufficient recording of race and ethnicity), with one exception -- Asian residents have enough births to allow a reliable calculation of their natality experience. Information on Hispanic Origin residents will be available when data for several years after January 1989 are ready for combined analysis.

Almost every measure reflecting the health of mothers and infants in Rhode Island indicates that non-White mothers and infants, especially Blacks, are in poorer health than White mothers and infants. Infant mortality[4] rates for the period 1984-1988 are 87% higher for Blacks and 16% higher for Asians than for Whites (Table N1 and Figure 5).

However, trends over time and comparison with national patterns put the Black experience in a more positive context (Figure 6 and Table N2). Over the past ten years, Rhode Island's Black infant mortality rate has declined by 56%, compared with a 29% decline for the White population. Rhode Island has moved from its position as the worst among states with substantial numbers of Black births, to fifth best, behind Oklahoma, Hawaii, Alaska, and Texas. During the same period, the Rhode Island infant mortality rate for Blacks fell from being 50% above the national rate to being 15% below the national rate.

Declines in Black infant mortality have occurred in both neonatal (age up to 30 days) and post-neonatal (30 days to one year) components of infant mortality (Tables N3 and N4). Rhode Island rates for both components for 1987-1989 are lower than the national rates, and in 1987-1989 Rhode Island had the lowest Black post-neonatal mortality rate of any state (U.S. Public Health Service, Centers for Disease Control, unpublished data).

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[4] Infant mortality is defined as deaths occurring from birth up to the first birthday.

Figure 5. Infant Mortality by Race, Rhode Island, 1984-1988

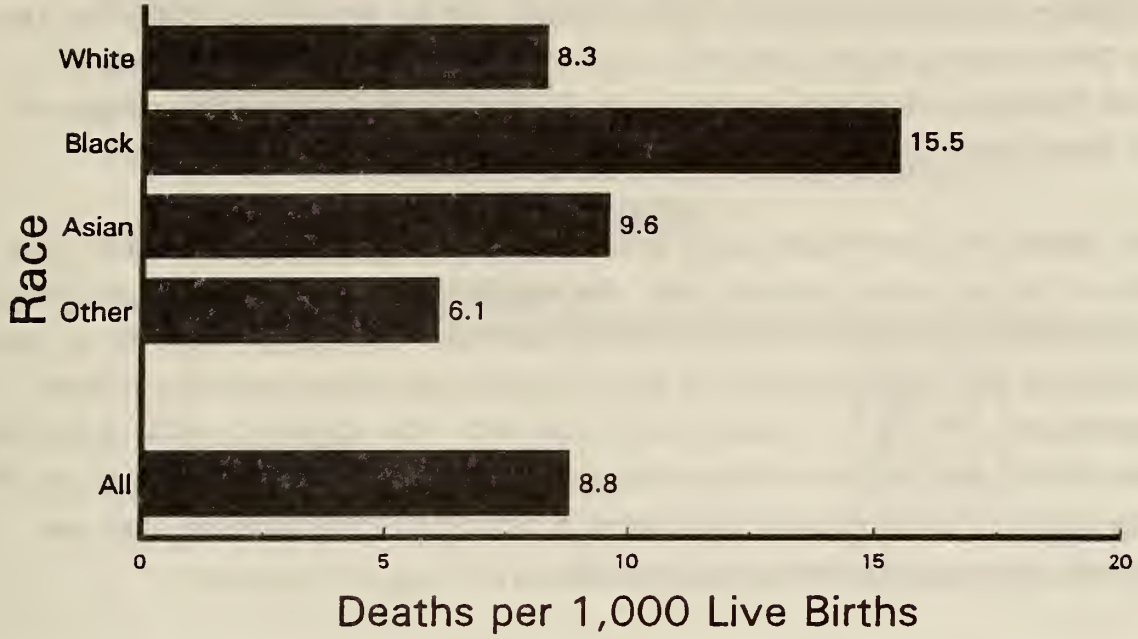
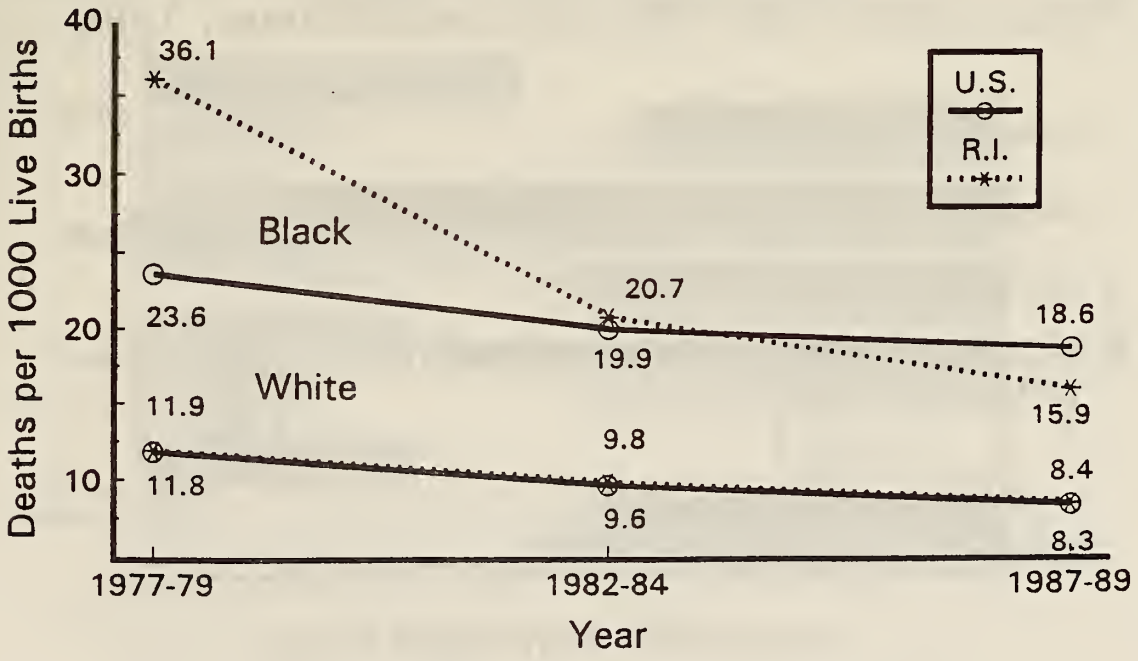


Figure 6. Infant Mortality by Race Rhode Island and the United States 1977-79 to 1987-89



Low birth weight is a major risk factor for infant mortality. Black rates for low birth weight (2,500 grams or less) and for very low birth weight (1,500 grams or less) are about twice those for White infants, and are higher than those for Asian and Other racial groups (Table N5). However, the low birth weight rates for Black Rhode Island infants are below the national rates for this group (Figure 7 and Table N6).

Birth weight has been found to be associated with maternal prenatal care. The earlier a woman enters prenatal care, the less likely she is to give birth to a low weight infant. It is not surprising to find that Black mothers in Rhode Island are more likely than White mothers to begin prenatal care either very late in their pregnancies or not at all (Figure 8 and Table N7). The same is true for Asian and other non-White mothers in Rhode Island. However, Rhode Island mothers of all races are more likely to enter prenatal care before the third trimester than are mothers nationally (Figure 8 and Table N8).

Pregnancy and birth occurring in adolescence can result in health and economic problems for both mother and child. Almost one out of every twelve (7.9%) White teenagers in Rhode Island becomes pregnant each year; almost half of these pregnancies result in live births (Figure 9 and Table N9). The pregnancy rate

Figure 7. Percentage of Low Birth Weight Births by Race Rhode Island, 1984-1988, and United States, 1989

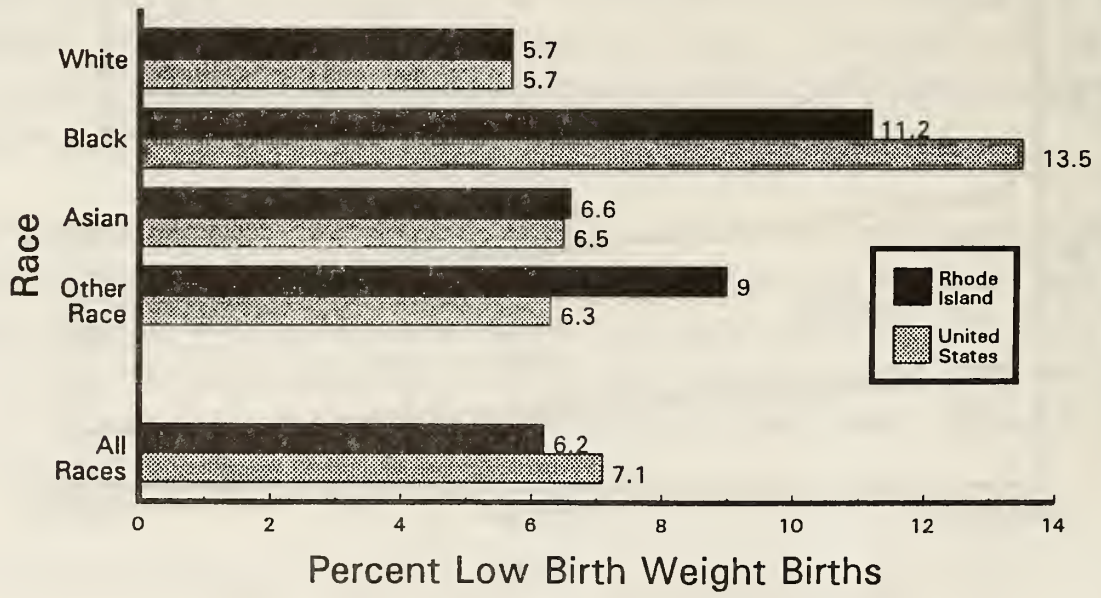


Figure 8. Percent Beginning Prenatal Care in 3rd Trimester or Not at All, by Race
Rhode Island, 1984-1988, and United States, 1989

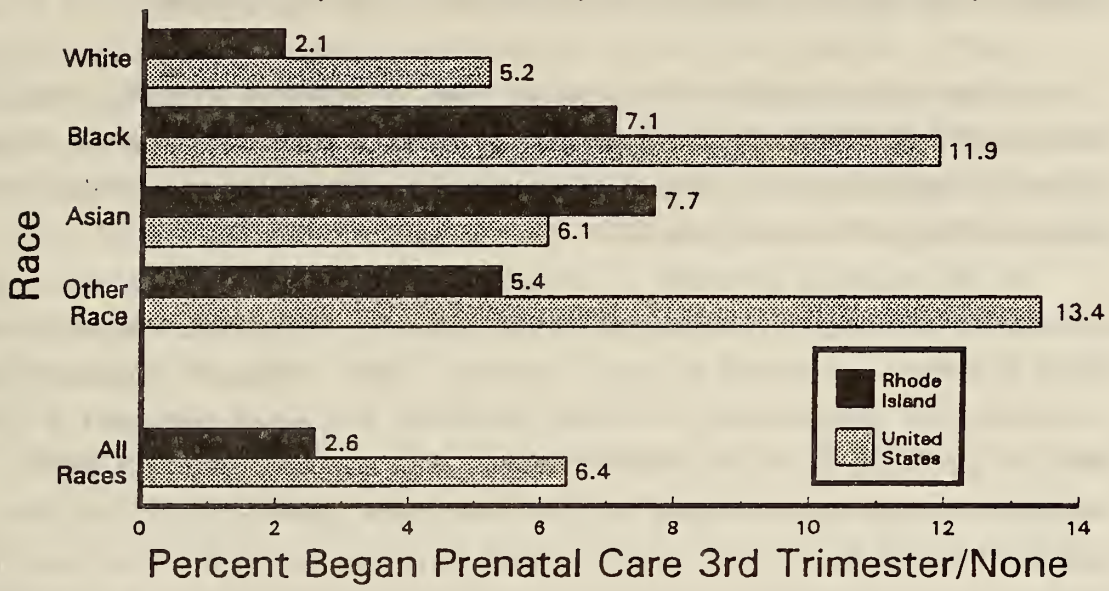
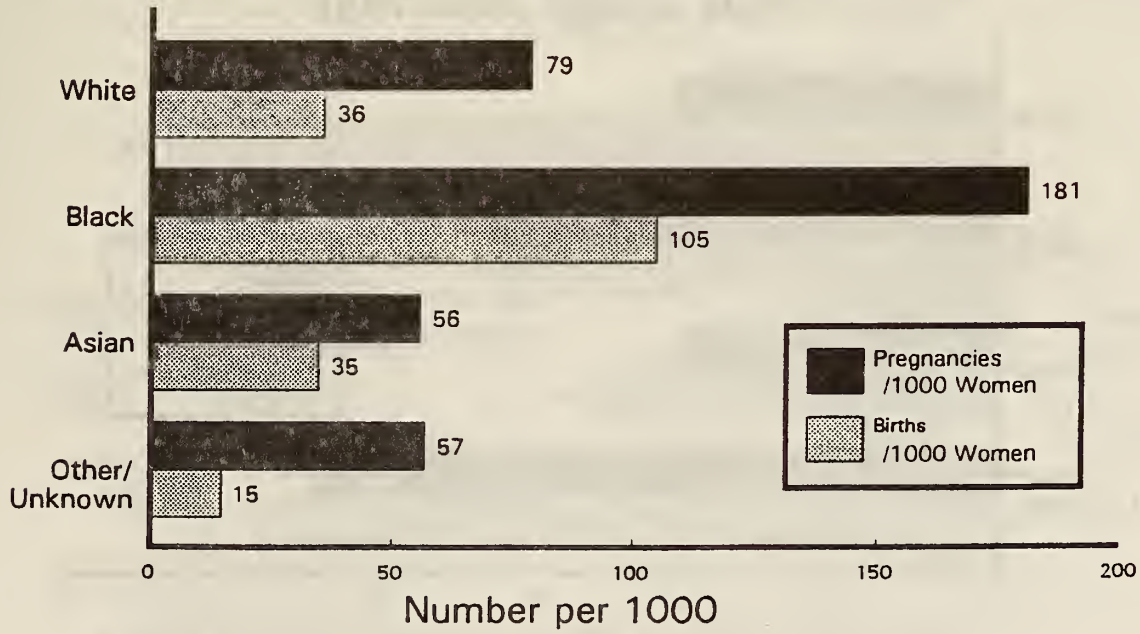


Figure 9. Birth Rate and Pregnancy Rate per 1000 Women Age 15-19, by Race, Rhode Island, 1984-1988

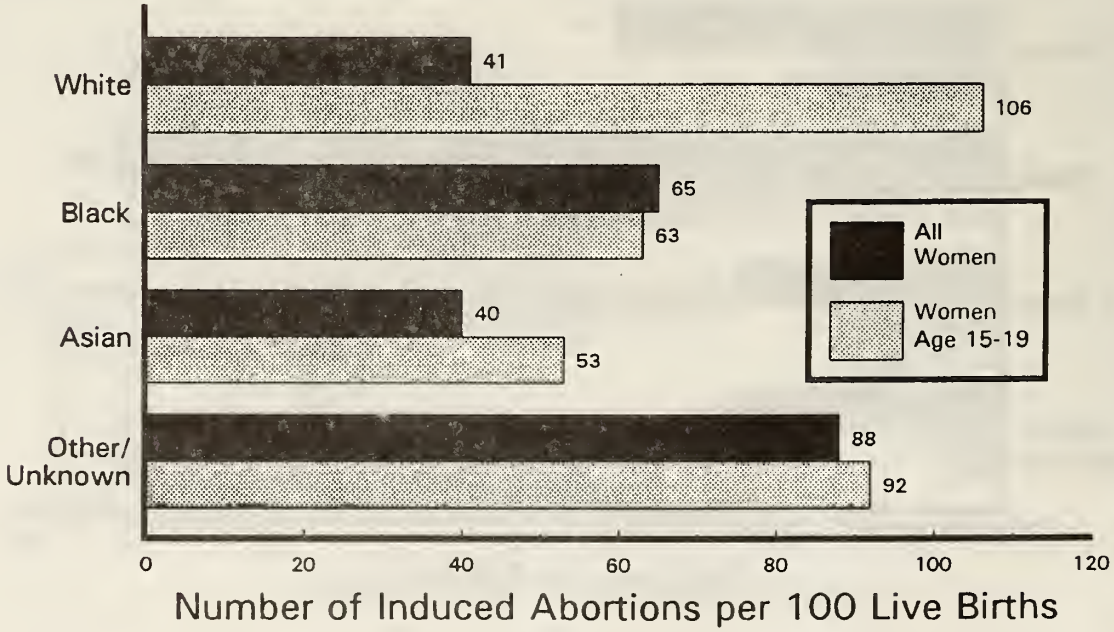


for Black teenagers is over twice as high, and the birth rate almost three times as high. The pregnancy rate for Asian adolescents is lower than the White rate, and the teen birth rate for Asians is virtually equal to that for Whites.

The abortion ratio (induced abortions per 100 live births) is a single indicator showing the distribution of pregnancy outcomes for a group of women; abortion ratios for Rhode Island women of all ages and for Rhode Island teenagers are shown in Figure 10 and Table N10.

For women of all ages, Asians and Whites are more likely than women of other races to carry a pregnancy to term. However, White teenagers are more likely to terminate their pregnancies than other teenagers, and Asian teenagers are more likely to terminate than older Asian women. The abortion ration for Black teenagers is slightly lower than that for older Black women; Blacks are the only group for which this is true. Asian women have the lowest abortion ratio of any group, by a slight margin with respect to Whites. It is likely that these striking differences in pregnancy outcomes reflect differing socio-cultural attitudes towards pregnancy and parenthood in adolescence, as well as different attitudes towards the practice and availability of induced abortions.

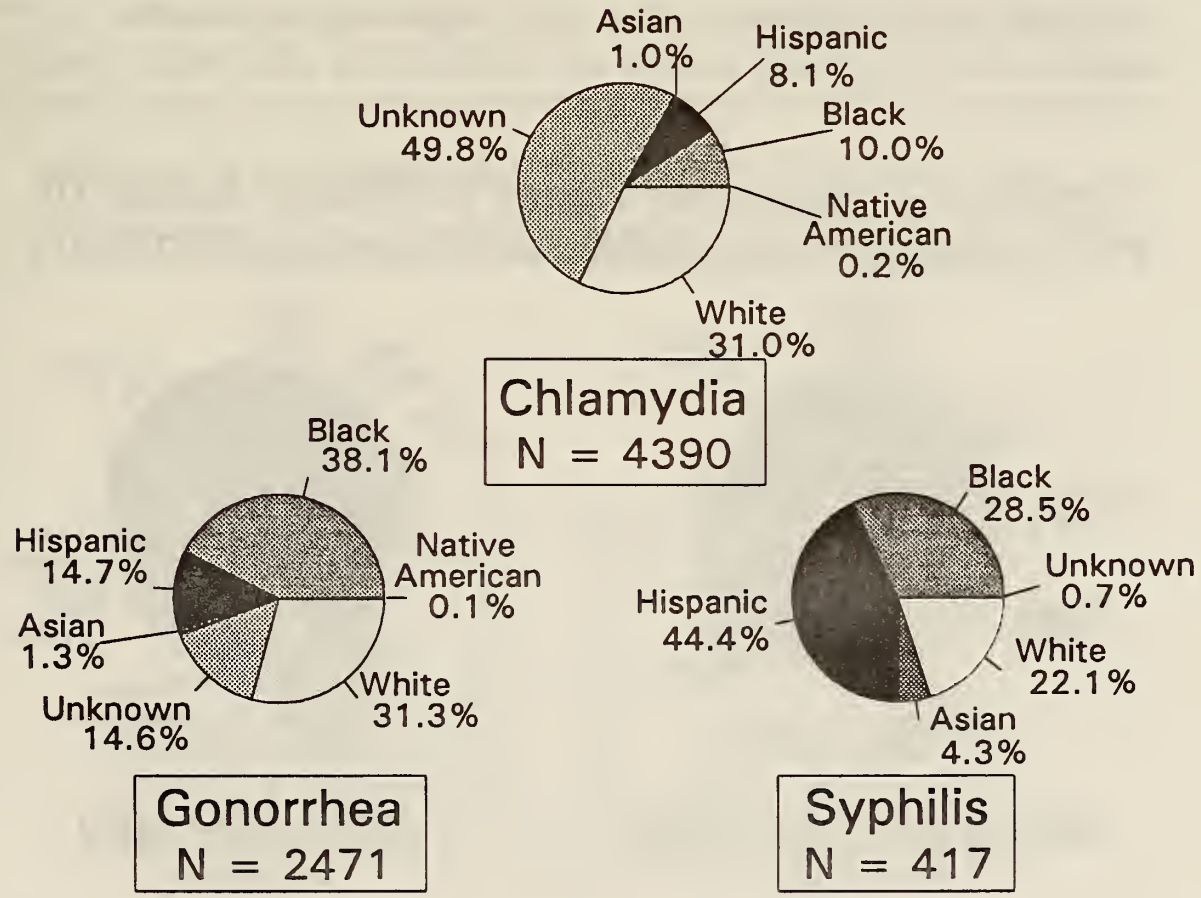
Figure 10. Induced Abortions per 100 Live Births, All Women and Women Age 15-19 Years, by Race, Rhode Island, 1984-1988



Reportable Diseases

There is a statutory requirement in Rhode Island for the reporting of all cases of hepatitis B, tuberculosis, AIDS, and sexually transmitted diseases (STDs). However, physician compliance varies considerably by disease, and race is a poorly reported variable for some diseases. Beginning in 1993 the Rhode Island Department of Health will require reporting of race by the categories used with the 1990 Census will add the requirement to report Hispanic Origin. Efforts are being made to increase physician compliance in reporting diseases and in recording race and ethnicity. Incidence data by race for these reportable diseases are summarized below.

Figure 11. Reported Cases of Sexually Transmitted Diseases, by Race and Ethnicity, Rhode Island, 1990-91



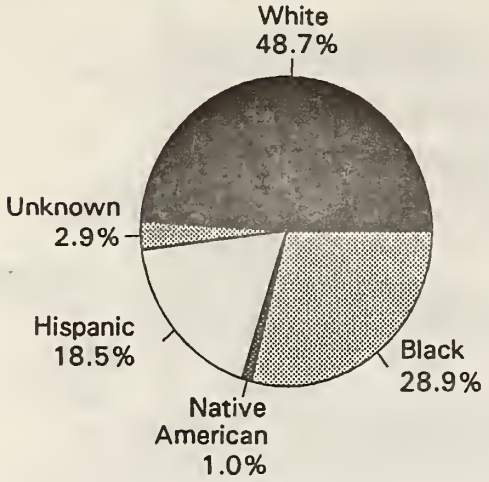
Sexually Transmitted Diseases

Chlamydia, gonorrhea, and syphilis were the sexually transmitted diseases reported most frequently in Rhode Island during the period 1990 - 1991. Race was not reported for 50% of chlamydia cases, nor for 15% of gonorrhea cases making it difficult to estimate accurately the incidence by race for these diseases. Nonetheless, among cases where race and ethnicity are reported, Hispanics and Blacks in particular are disproportionately represented (Figure 11 and Table D1).

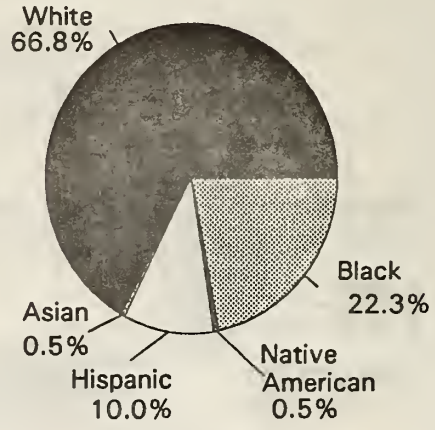
AIDS and HIV Infection

Race and ethnicity are more consistently reported for AIDS and HIV infection than for other STDs. As for STDs, Blacks and Hispanics are disproportionately represented among both diagnostic groups. Blacks account for 22% of reported AIDS cases diagnosed between 1987 and 1991; Hispanics account for 10% of cases and non-Hispanic Whites for 67% of cases (Figure 12 and Table D2). Minorities are even more disproportionately represented among HIV positive individuals reported between 1989 to 1991, suggesting that minority representation among AIDS patients will increase in the years ahead. Blacks

Figure 12. Reported Cases in Rhode Island of HIV Infection and AIDS, by Race and Ethnicity



HIV Infection (1990 - 1991)
N = 1037



AIDS (1987 - 1991)
N = 440

account for 29% of HIV positive cases and Hispanics for 19%; Blacks and Hispanics account for nearly half of the reported HIV positive cases, compared to their share of the population at under 10%.

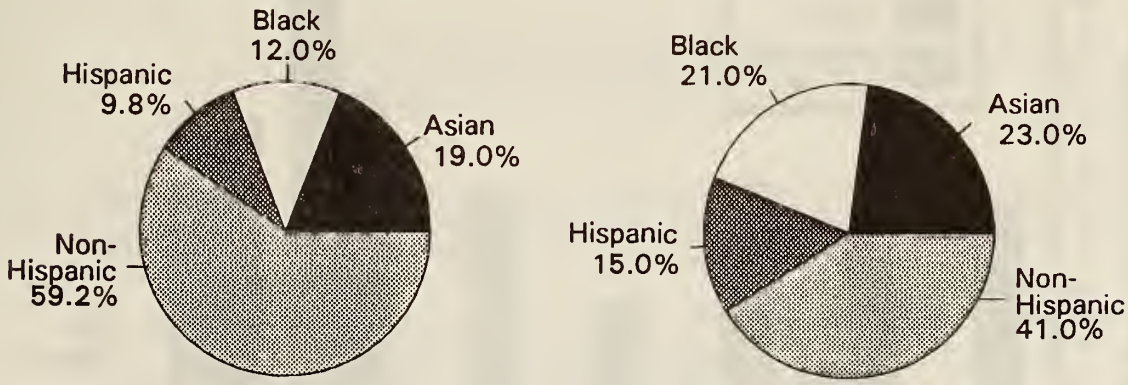
Tuberculosis

Annual tuberculosis (TB) morbidity in RI has increased 31% between 1985 and 1991. During this period the proportion of minority TB cases increased while the proportion of non-Hispanic White cases decreased (Figure 13 and Table D3).

The incidence rate of tuberculosis in 1990 was 4.6 per 100,000 among White residents of Rhode Island. In minority populations however, the rates were dramatically higher. Rhode Island's Asian population had morbidity rates higher than those for the state's Black and Hispanic populations and higher than those seen nationally among Asians. In addition, the proportion of tuberculosis cases occurring among foreign-born residents increased from 1985 to 1991.

Over the same period, there has also been a significant increase in the number of cases occurring among children under 15 years of age, and racial and ethnic

Figure 13. Reported Cases of Tuberculosis Rhode Island 1985-89, and 1990-91



1985-1989
$\bar{X}$ = 51 / year
48% Foreign Born

1990-1991
$\bar{X}$ = 73 / year
53% Foreign Born

minority children represent a majority of these cases (Figure 14). Nearly one-fourth of all active tuberculosis cases in 1990 occurred in children under 15 years of age; minorities accounted for 67% of cases among children in 1990 and for 82% of cases in 1991. Foreign-born children were 28% of cases among those under age 15 during 1990-91.

Hepatitis B

Between 1987 and 1991 there were 326 reported cases of hepatitis B in Rhode Island. A large proportion (32%) of reported cases did not include information on the race of the infected individual. However, minorities comprise one-quarter of those cases which were reported by race, indicating that these groups are at higher risk for hepatitis B (Figure 15 and Table D4).

Figure 14. Reported New Cases of Tuberculosis per 100,000 Population, All Ages and Ages 0 - 14 Years, Rhode Island, 1985 - 1991

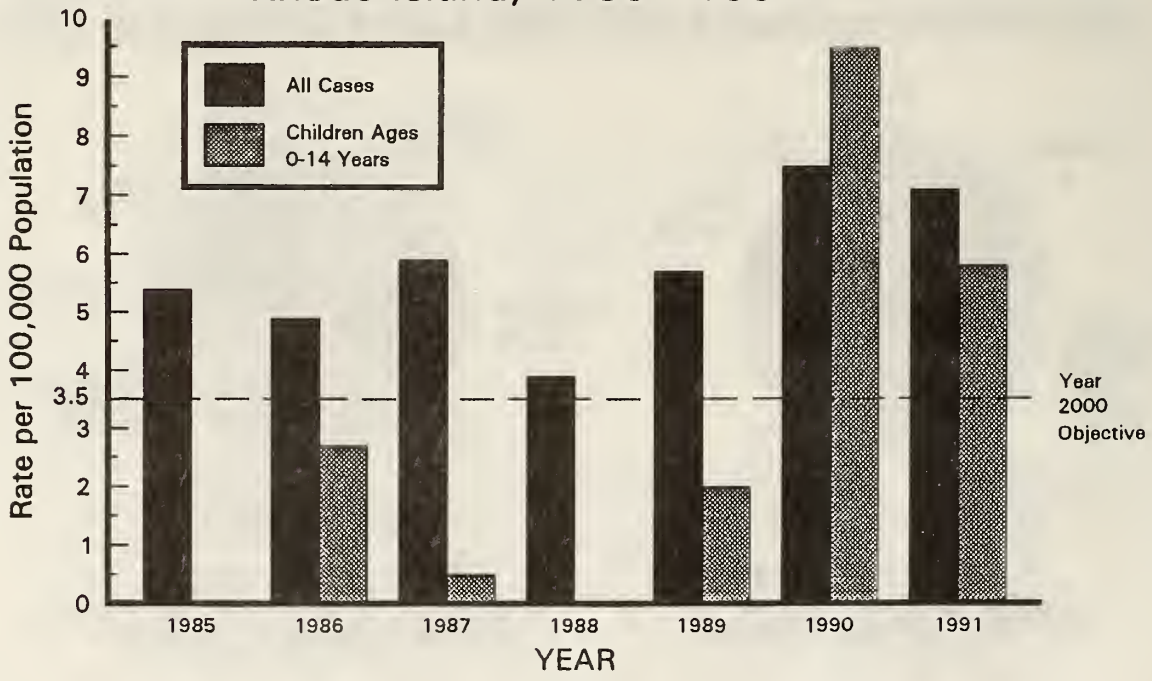
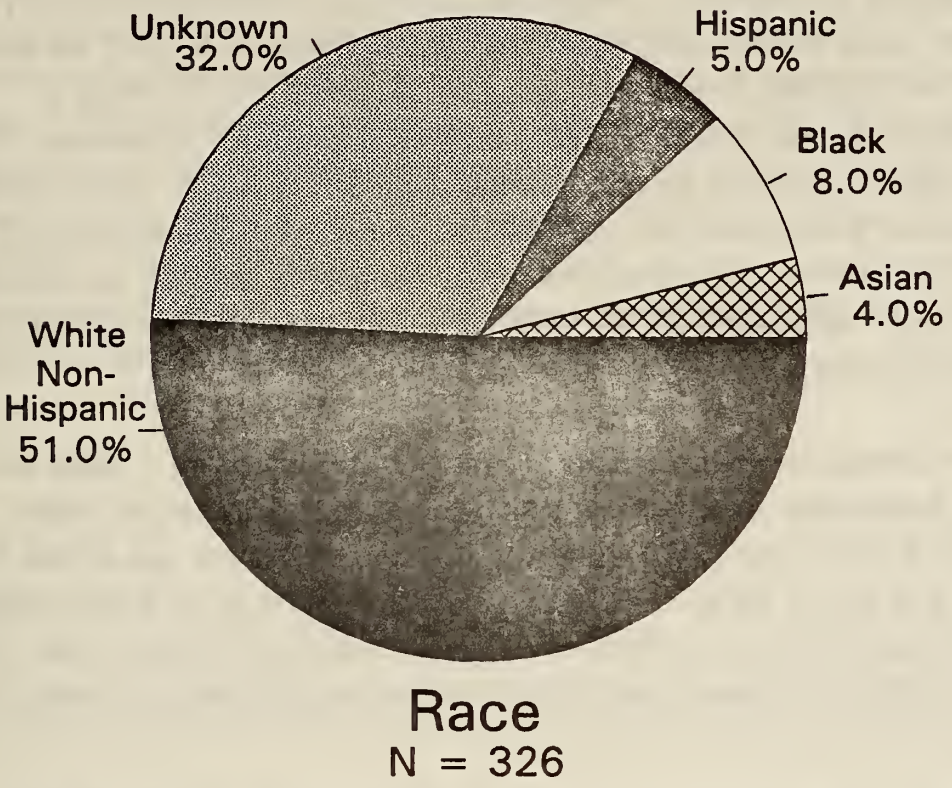


Figure 15. Reported Cases of Hepatitis B by Race and Ethnicity, Rhode Island 1987-91

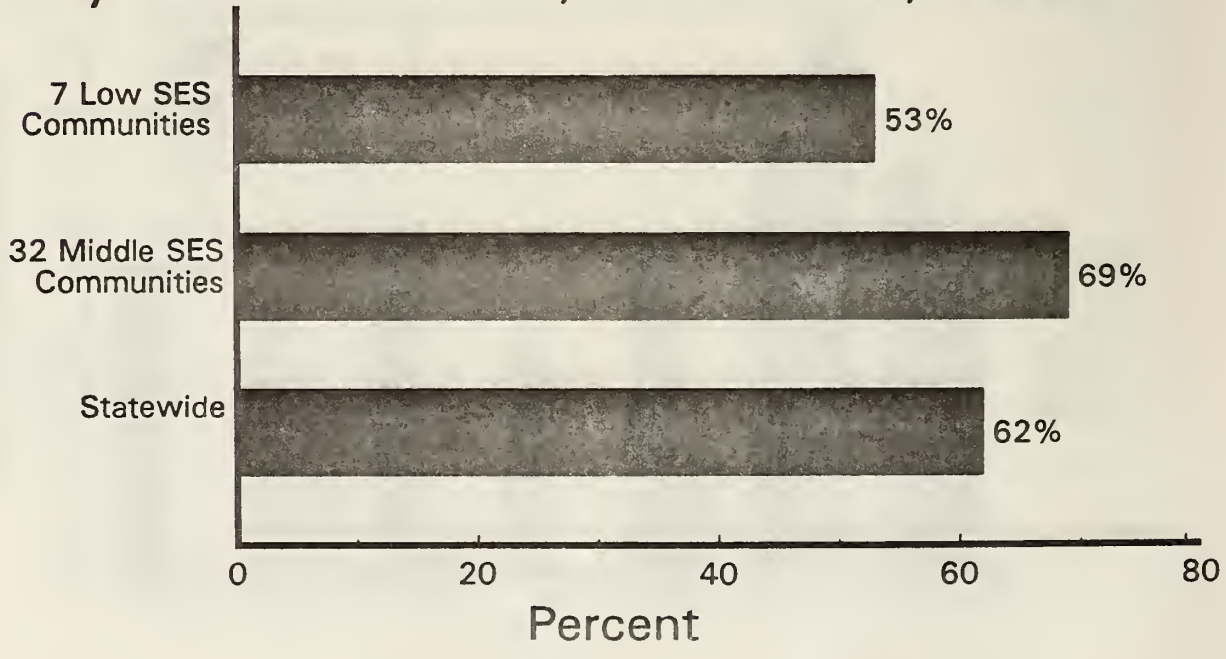


Immunization for Childhood Diseases

The Rhode Island Department of Health has conducted retrospective surveys during recent years to determine how many children have completed the series of childhood immunizations [3 doses of oral polio vaccine (OPV), 4 doses of diphtheria, tetanus, and pertussis (DTP) vaccines, and 1 dose of measles, mumps, and rubella (MMR) vaccines] by their second birthday. Although immunization rates of minority groups have not been directly measured, the immunization status of minority children has been approximated by comparing rates for low socio-economic status (SES) communities in Rhode Island with rates for middle and high SES communities.

Seven communities have been included in the low SES grouping -- these are Providence, Pawtucket, Central Falls, Woonsocket, East Providence, West Warwick and Bristol. While only 38% of all children under the age of two live in these cities and towns, 88% of all Hispanic children, 85% of all Black children, 74% of all Asian children, and 62% of all Native American children under the age of two live in them. It seems safe to assume that these cities and towns include

Figure 16. Percentage of Children with Basic Immunization Series Completed by Age 2, by SES of Residence, Rhode Island, 1990-91



most of the state's low SES communities, as well as most of Rhode Island's minority children.

The data reveal a marked discrepancy between the immunization level in the communities with lower SES and the level in those of middle and high SES. For 53% of children living in the seven low SES communities, the series of routine immunizations was completed by age two, compared to 69% of children living in middle or high-SES communities. Statewide, 62% of all children were series complete by age two (Figure 16). These data are strong indication that immunization rates for minority children are lower than those for non-minority children in Rhode Island.

1990 Rhode Island Health Interview Survey

Information from the 1990 Rhode Island Health Interview Survey (HIS) is presented in the following sections, covering the health status, health risk behavior, use of health care providers, and health insurance coverage of Rhode Island residents. The 1990 Rhode Island HIS is a telephone survey of a random sample of 2,588 of the state's households, including 6,536 residents. An over-sample of minority households was obtained in the 1990 HIS, including 330 White Hispanics, 380 Blacks, and 120 persons of other races, making possible reliable estimates of the health and health-related behavior of Rhode Island's minority populations. The sample has been weighted to reflect the 1990 Census counts for Rhode Island by age, sex, race, Hispanic Origin, and town of residence.

While the intent of a telephone survey is to obtain information from a sample of people who represent the population as a whole, the nature of conducting a survey by phone means that some individuals are not represented, i.e. households without phones and households unwilling to participate in the survey (non-responders). Seventy-eight percent of the households randomly selected for inclusion actually participated in the 1990 HIS.

Health Status

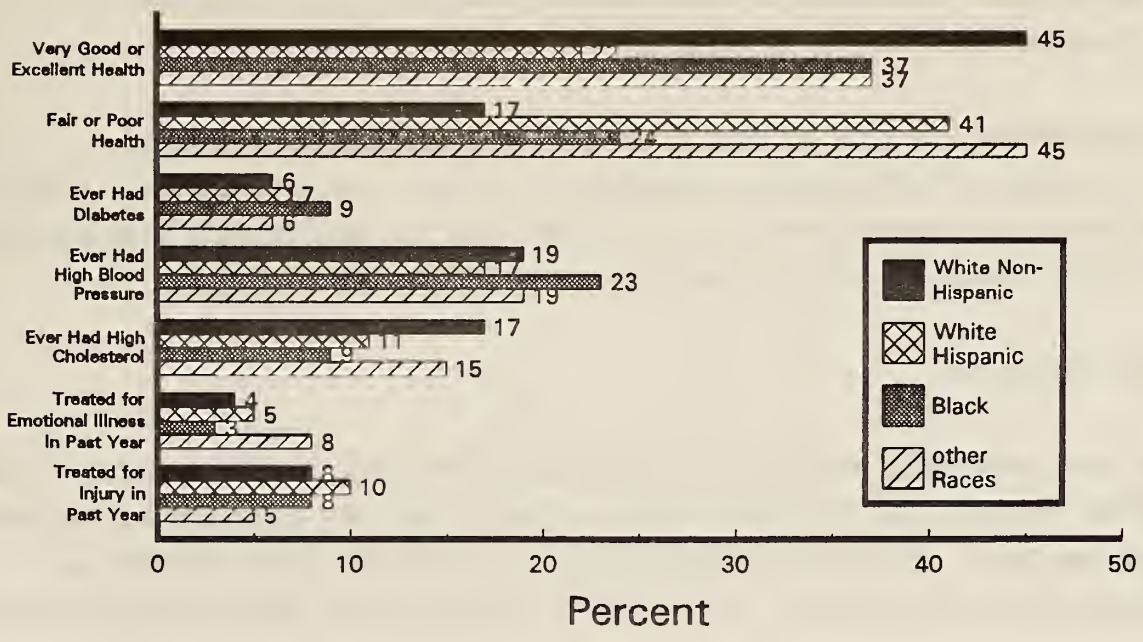
The HIS provides self-reported measures of general health status, diabetes, high blood pressure, high cholesterol, emotional illness, and injury. Results of these measures by race and ethnicity (Hispanic Origin) for Rhode Island are presented in Figure 17 and in Tables S1 -S5.

General Health Status

The variation in general health status for adults 18 and over in different race/ethnic groups is substantial (Table S1). White non-Hispanics are most likely to consider themselves in very good or excellent health; White Hispanics and persons of Other Races are most likely to report their health as fair or poor. Blacks are closer to White non-Hispanics in their ratings than they are to White Hispanics.

While self-reported health status has been found in some studies to approximate closely health status based on physical examination, the applicability of this

Figure 17. Measures of Reported Health Status by Race and Ethnicity, Age 18 and Older, Rhode Island, 1990



finding to apecific ethnic groups is unknown. The very high proportion of White Hispanics and persons of Other Races reporting themselves to be in poor or fair health may reflect culturally based differences in perceptions and reporting of health rather than actual health status.

Diabetes

Respondents were asked whether they or any one in their household had ever been told they had diabetes, sugar in their urine, or high blood sugar. Black Rhode Islanders had the highest percentage (9%) of affirmative responses to this question and persons of Other Races had the lowest percentage of affirmative responses (6%) (Table S2). (Although research indicates that self-report is an accurate measure of the prevalence of diagnosed diabetes, much diabetes is undiagnosed and can be detected only through health examination surveys.)

According to national prevalence estimates, non-Hispanic Whites have the lowest prevalence of diabetes, followed by Blacks and Hispanics. The prevalence among other groups is also considered to be higher than it is among Whites.

High Blood Pressure

Blacks age 18 and older in Rhode Island had the highest percent reporting they had "ever been told by a doctor that they had high blood pressure or hypertension" (Table S3). White Hispanics had the lowest proportion of affirmative responses to this question.

Self-reported data may be used to assess the prevalence of diagnosed hypertension and hypertension awareness, as in the case of diabetes. National prevalence estimates based on actual health examinations indicate that Blacks and Hispanics are at greater risk than Whites for hypertension.

High Cholesterol

A higher percentage of White non-Hispanics (17%) than of other groups in Rhode Island reported they had "been told by a doctor that their blood cholesterol level was too high". Blacks (9%) reported the lowest percentage of affirmative responses to this question. Differences on this item may reflect differential rates

of participation in cholesterol screening rather than actual differences in the prevalence of high cholesterol.

Of those reporting high cholesterol, Blacks had the highest percentage (54%) who said their cholesterol was currently under control, while persons of Other Races had the lowest proportion (25%) say their high cholesterol was under control (Table S4).

Emotional Illness and Injuries

Other indicators of health status included questions regarding treatment in the past year for an emotional illness, and treatment in the past year for one or more injuries (Table S5). Persons of Other Races had the highest proportion reporting treatment for an emotional illness, Blacks had the lowest. White Hispanics had the highest proportion reporting treatment for one or more injuries (10%), persons of Other Races had the lowest (5%).

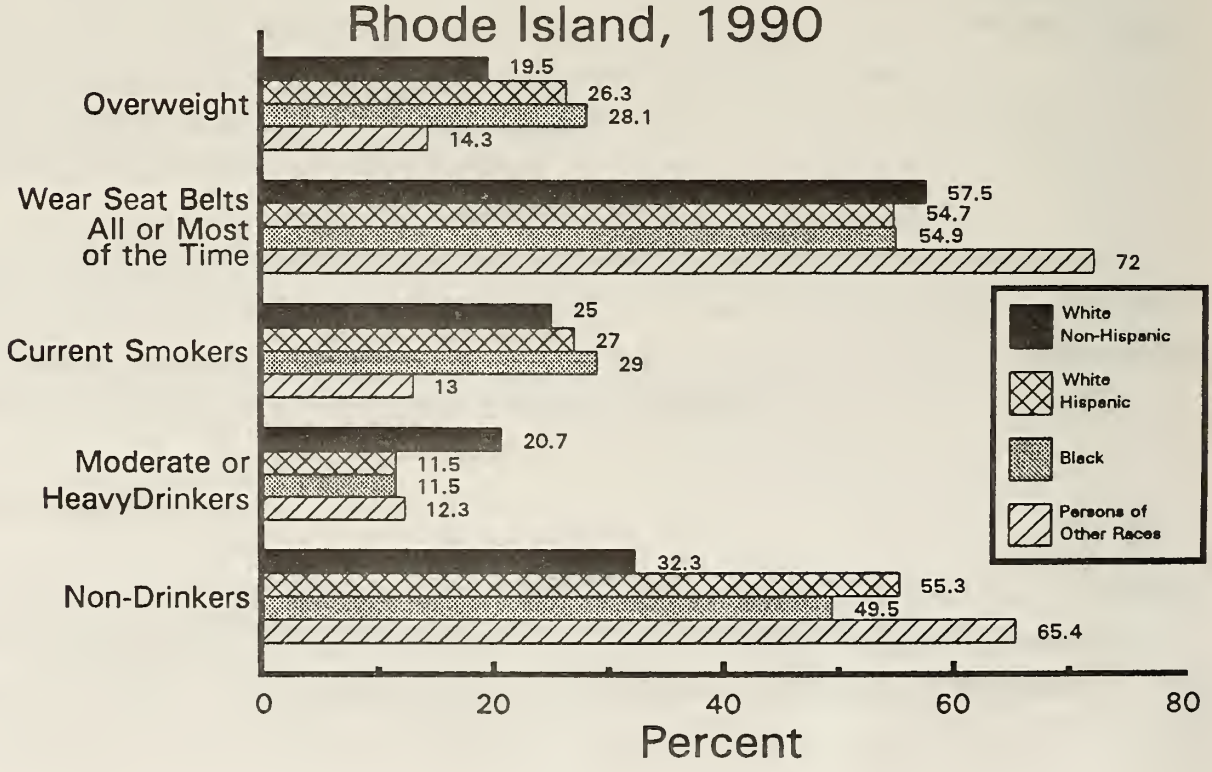
Health Risk Behaviors

The HIS provides prevalence measures for several major health risk behaviors for Rhode Island adults age 18 and older. Health risk behaviors included are smoking, alcohol consumption, and obesity. Rates of participation in clinical breast exam and mammogram screening are included for women 40 and older, and participation in Pap smear screening is included for women 14 and older. Use of car safety restraints (belts or child seats) for all ages are included as well. (Figure 17 and Tables B1 - B9.)

Smoking

Current smoking rates are marginally higher for Blacks (29%) than for White Hispanics (27%) or White non-Hispanics (25%) in Rhode Island. Persons of Other Races have the lowest rate of current smokers (Table B1).

Figure 18. Measures of Reported Health Risk By Race and Ethnicity, Age 18 and Older, Rhode Island, 1990



When smoking status is examined by sex (Figure 19 and Table B2), Black females are seen to have a higher rate of current smokers than any other group (31%). About one-fourth of Black males and males of Other Races, and about one-fourth of male and female Whites, Hispanic and non- Hispanic, are current smokers. Only 6% of females of Other Races identify themselves as current smokers.

Higher proportions of males are former smokers than of females in all groups, and White Hispanic males had the highest proportion (35%) of former smokers. However, when "quit rates" are calculated [number of former smokers divided by number of current plus former smokers, expressed as a percentage], females of Other Races have the highest quit rate (60%), followed by Hispanic Males. White Hispanic females have the lowest "quit rate" (Figure 20).

When race and sex groups are compared for rates of non-smoking (i.e., persons who have never smoked), females in Rhode Island generally have a higher proportion of non-smokers than males, and females of Other Races have the highest proportion of non-smokers (84%). White Hispanic males have the lowest percentage of non-smokers (39%). Figure 21 displays race and sex variations in the reported percentage of non-smokers.

Figure 19. Current Smoking Rate by Sex, Race and Ethnicity, Rhode Island, 1990

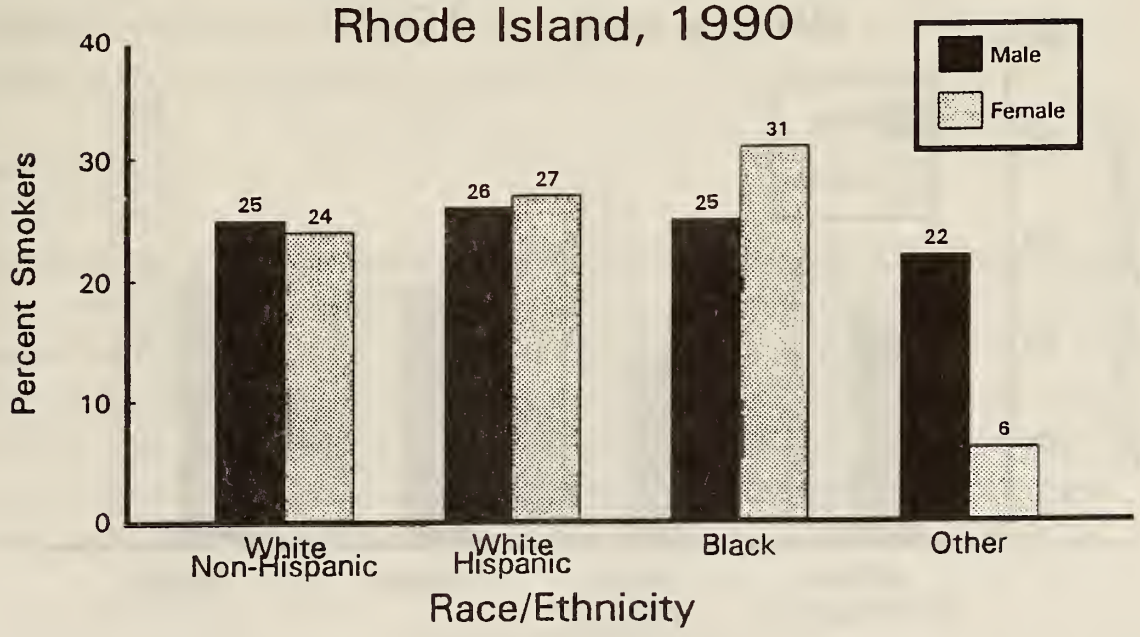


Figure 20. Quit Rate for Smokers by Sex, Race and Ethnicity, Rhode Island, 1990

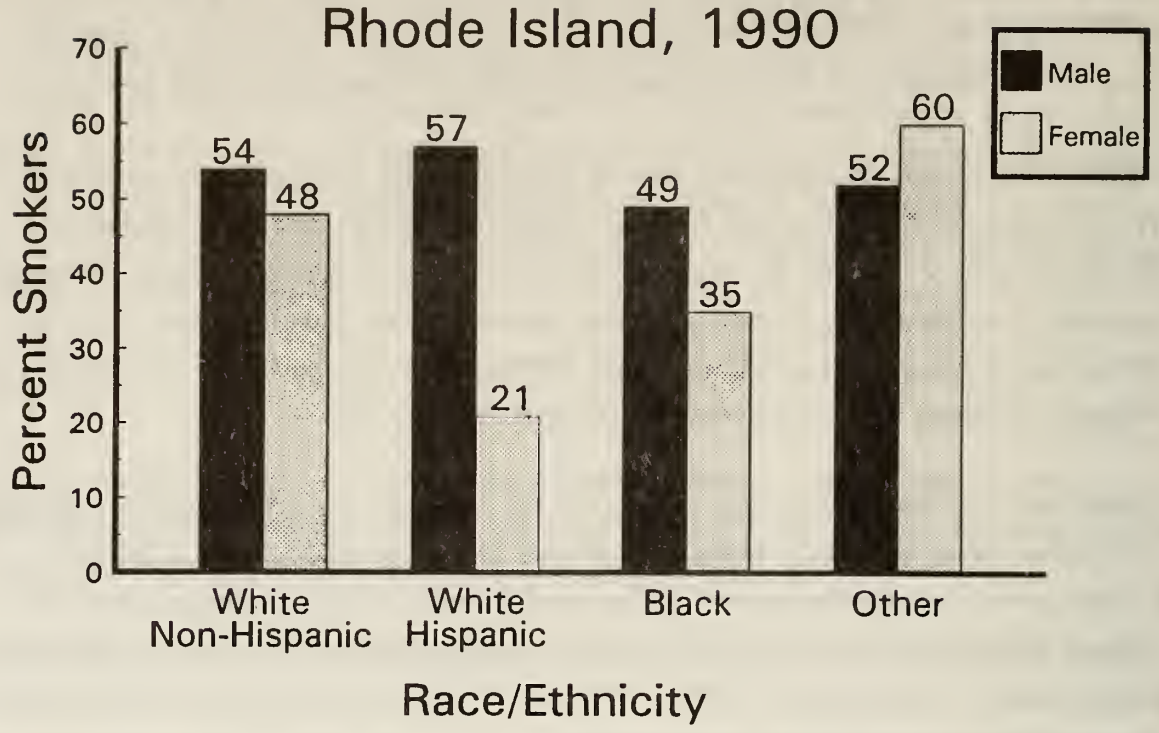
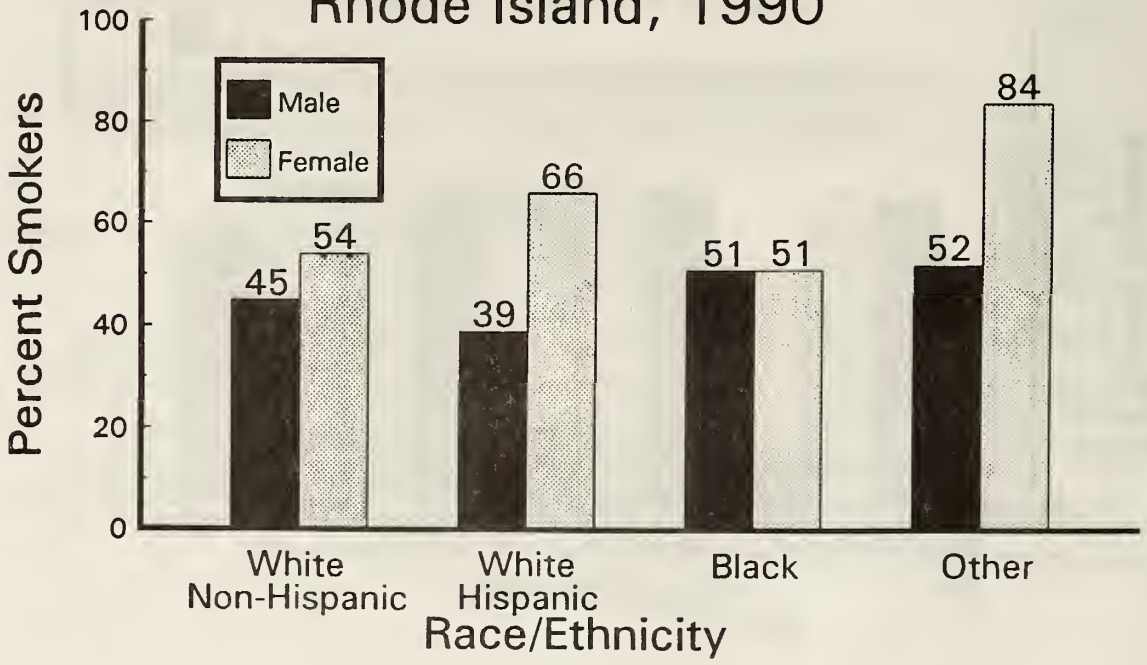


Figure 21. Non-Smoking Rate by Sex, Race and Ethnicity, Rhode Island, 1990



Alcohol Consumption

The alcohol consumption of Rhode Islanders age 18 and older have been categorized by their responses to a series of questions on the HIS about the amount and frequency of alcohol intake. The categories are defined as follows:

Non-drinker:	Has had less than 12 drinks in any one year.
Former Drinker:	Has had more than 12 drinks in a year, but not more than 1 drink in the past year.
Two-week Abstainer;	Has had more than 12 drinks in the past year, but none in the past 2 weeks.
Light Drinker:	Has had 1-6 drinks in the past 2 weeks
Moderate Drinker:	Has had 7-27 drinks in the past 2 weeks
Heavy Drinker:	Has had 28 or more drinks in past 2 weeks

White non-Hispanics, both males and females, have the highest rate of alcohol consumption of any group in Rhode Island -- 68% report consumption of alcohol either currently or in the past, and 21% are moderate or heavy drinkers compared with about 12% in each of the other groups. Persons of Other Races and White Hispanics have the lowest rates of alcohol consumption; 65%, and 55% respectively are reported to be non-drinkers (Table B3).

Females are much more likely to be non-drinkers than males among White non-Hispanics, White Hispanics, and Blacks. Males and females of Other Races are equally likely to be non-drinkers (Table B4).

Overweight

Data from the Rhode Island HIS mirror national data which indicate that obesity is more prevalent among certain minority populations than in the White non-Hispanic population (Table B5). [An individual is determined to be overweight if his or her Body Mass Index (BMI)[5] equals or surpasses the age-sex specific cutoffs used with the Year 2000 National Health Objectives.] In Rhode Island the highest prevalence of obesity occurs among Blacks (28%) and White Hispanics (26%), while persons of Other Races have the lowest prevalence of overweight (14%).

[5] Body Mass Index is calculated as weight measured in kilograms divided by the square of height measured in meters.

Safety Belt Use

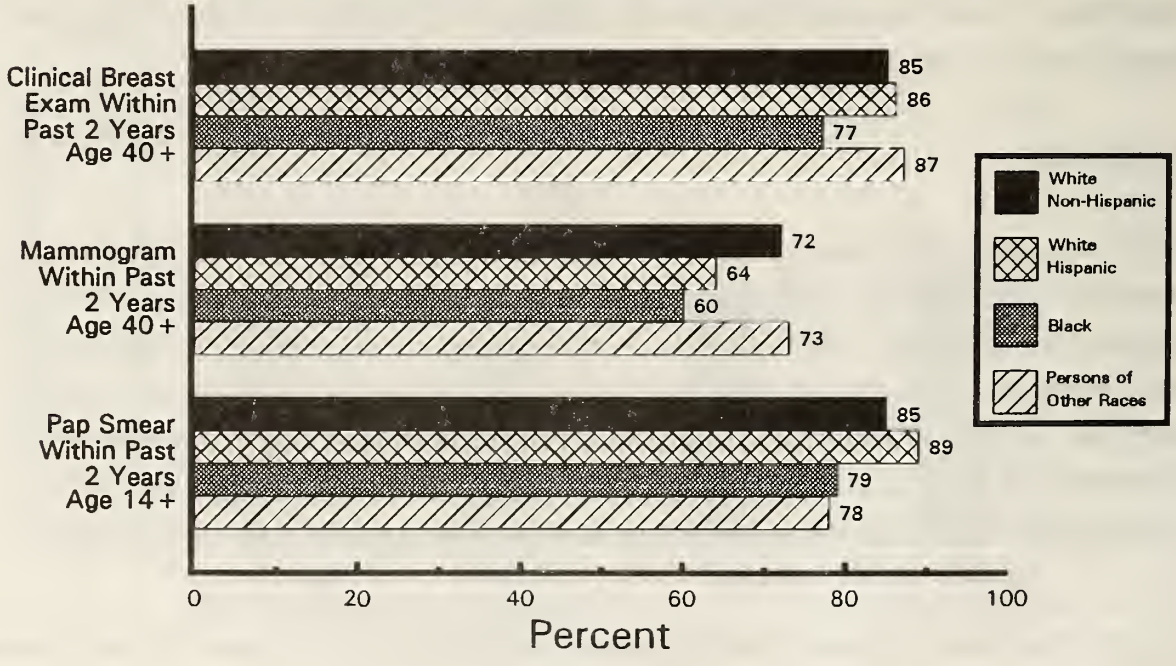
Persons of Other Races have the highest proportions reporting use of safety belts or child restraints all or most of the time (72%). In all other groups, somewhat more than half report wearing safety belts or using child restraints all or most of the time (Table B6).

Breast Cancer Screening

Ninety-five percent (95%) of Rhode Island women age 40 and over have had a clinical breast exam at some time, and more than 85% report having had a clinical breast exam within the past two years. Blacks have the lowest reported frequency (77%) of such an exam in the past two years, compared with about 86% of women in all other groups (Figure 22 and Table B7).

Seventy-nine percent (79%) of women over the age of 40 report having had a mammogram at some time, and 72% have had a mammogram within the past two years (Figure 22 and Table B8). Blacks have the lowest reported frequency

Figure 22. Measures of Reported Participation of Women in Breast and Cervical Cancer Screening by Race and Ethnicity, Rhode Island, 1990



(60%) of mammograms in the past two years followed by White Hispanics (64%). About 72% of White non-Hispanics and persons of Other Races report having had a mammogram within the past two years.

Cervical Cancer Screening

Eighty-four percent (84%) of Rhode Island women over the age of 14 report having had a Pap smear to screen for cervical cancer in the past two years. White Hispanics (89%) and White non-Hispanics (85%) have the highest reported frequency of Pap smears in the past 2 years. While the frequency of Pap smears among Blacks (79%) and persons of Other Races (78%) is also high, these groups have a higher proportion of women reporting they have never had a Pap smear. This is true for 11% of Blacks and for 19% of Other Races compared with 8% of other women (Figure 22 and Table B9).

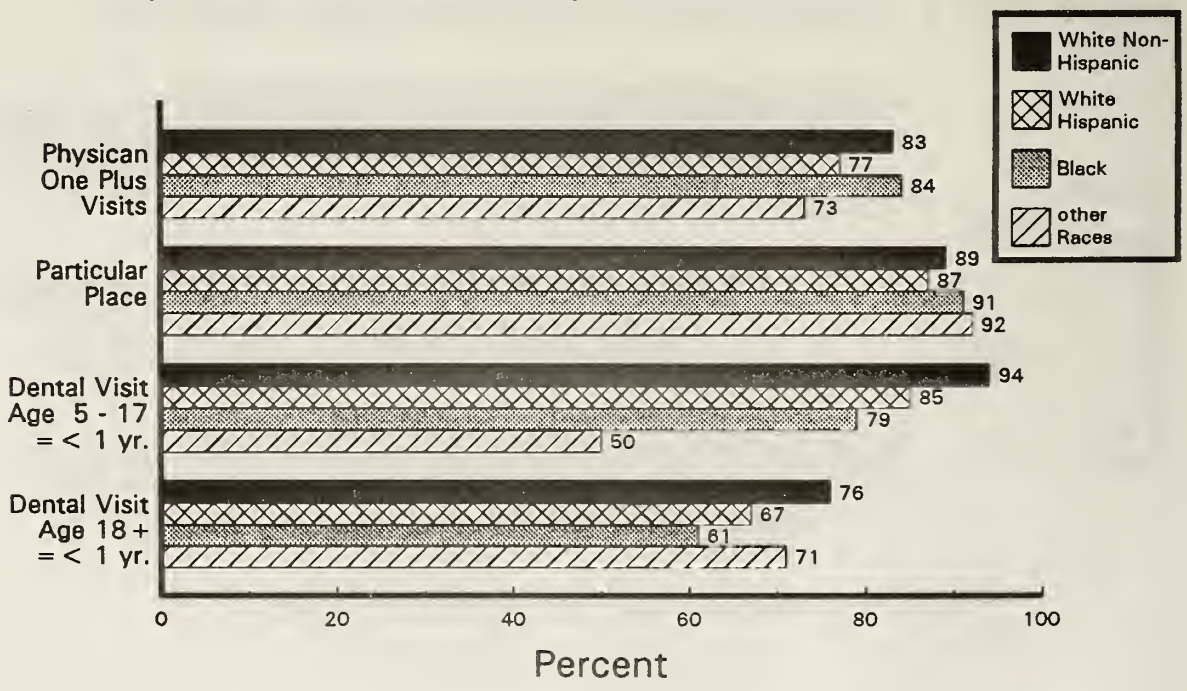
Use of Health Care Providers

Information on the patterns of utilization of various health care providers was obtained through questions on the 1990 Rhode Island HIS. In particular, the utilization of dentists and physicians and the regular source of health care have been analyzed and presented here (Figure 23 and Tables U1 - U5).

Dental Visits

White non-Hispanics have a higher rate of dental visits than any other group in Rhode Island, both for children and adults. Persons of Other Races have the lowest rate for children and Blacks the lowest rate for adults (Tables U1 and U2). Children (ages 5-17) are more likely than adults to have seen a dentist within the past year in each of the three major race/ethnic groups (White non-Hispanic, White Hispanic, and Black). The converse is true for Persons of Other Races; the percentage of adults of Other Races who have been to the dentist in the past year is 20% greater than the percentage of children of Other Races who have been to a dentist in the past year.

Figure 23. Selected Measures of Health Care Used by Race and Ethnicity, Rhode Island, 1990



Ninety-four percent (94%) of White non-Hispanic children have been to the dentist in the past year, compared with 85% of White Hispanics, and 79% of Blacks. Only 50% of children of Other Races have made a dental visit in the past year and 27% of children of Other Races are reported never to have been to a dentist compared with 9% or fewer in other groups. Almost all children's visits were made for a checkup or cleaning.

White non-Hispanic adults (ages 18 and over) reported the highest proportion of dental visits (76%) within the past year compared with 61% of Blacks, who report the lowest proportion of such visits. Nearly 91% of adult visits were for a checkup and cleaning; White non-Hispanics report the highest proportion of such routine visits (92%) and Blacks the lowest (74%). Although less than 1% of all adults have never been to the dentist, 10% of adults of Other Races and 5% of Black adults have never been to a dentist.

The patterns of utilization of dental care among minority populations in Rhode Island may be influenced by lack of access to providers and lack of coverage for dental care costs among low-income persons. Almost all private dental insurance is received as a fringe benefit of employment, and few providers participate in the Medical Assistance (Medicaid) program, which is the sole source of reimbursement for dental care available to low-income persons in Rhode Island.

Physician Visits

The proportion of individuals of all ages reported to have visited a health care provider in the past 12 months is high in all groups, ranging from 73% for Other Races, to 84% for Blacks. The mean number of visits does not vary significantly between groups although it is of some note that White Hispanics have the highest mean number of visits (5.1), but next to the lowest in percentage of making any visits (74%) (Table U3).

When the proportion with any physician visits in the past 12 months is examined by age and sex, the greatest variation between race groups in Rhode Island occurs among those age 0-17. For those age 0-17, Blacks reported the highest proportion of physician visits (94%) followed by White non-Hispanics (89%). White Hispanics have a considerably lower proportion of children with any physician visits (74%) and children of Other Races are even lower (62%). Rates

for adults age 18 and over do not vary significantly between race groups, ranging from 79% to 82%.

Rates for children can be compared with those for adults within each race/ethnic group. Rates for those age 0-17 are substantially higher than those for adults among Blacks (94% versus 78%) and somewhat higher among White non-Hispanics (89% versus 82%). By contrast, rates for those age 0-17 are slightly lower than those for adults among White Hispanics (74% versus 78%) and substantially lower among persons of Other Races (62% versus 79%).

The percentage of male and female children with any physician visits varies within race groups. Rates are comparable between males and females for White non-Hispanics and White Hispanics, while the rate for Black females is 8% lower than for Black males, and the rate for females of Other Races is 17% lower than for males of Other Races.

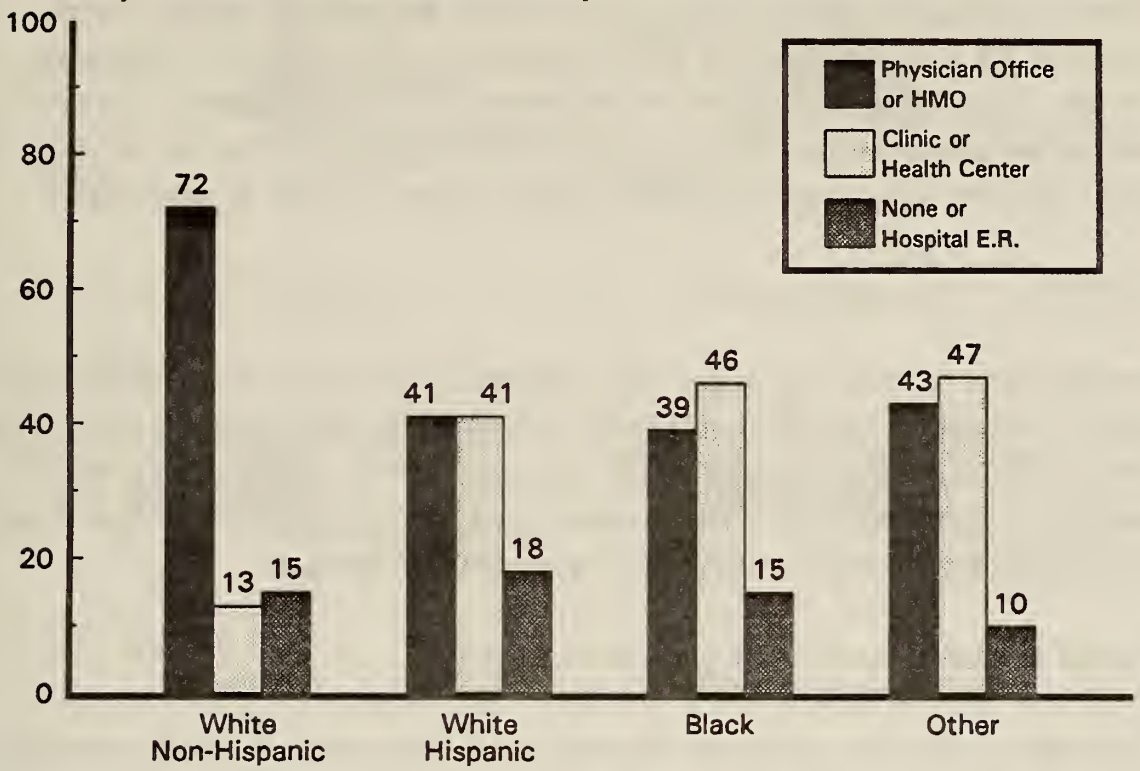
For adults 18 and over, females in each of the race/ethnic groups have a substantially greater percentage with any physician visits than males. The greatest differential occurs between males and females of Other Races (22% difference), and the smallest between Black males and females (7% difference).

These observations suggest there may be important differences between race/ethnic groups in the use of medical services for children, and for men and women. Such differences, if validated through other sources, are likely to relate both to differences in health status between groups, and to culturally based differences in attitudes towards illness and towards medical care providers.

Regular Place for Health Care

Close to 90% of individuals of all ages have a particular place they go when they are sick or in need of advice about health (Table U4). While all groups rely on private physicians more than any other single source of health care, two-thirds of White non-Hispanics rely on private physicians for health care, while a majority in each minority group rely on a combination of other sources. After private physicians, health centers and hospital outpatient clinics were most frequently reported as providers of health care by minority respondents. Eleven percent of the sample reported having no specific place where they receive health care and

Figure 24. Usual Source of Care by Race and Ethnicity, Rhode Island, 1990



there is little variation in this proportion between groups. The sources of health care by race/ethnicity are presented in Table U5 and in Figure 24.

Coverage by Health Insurance

Access to adequate medical care can be impeded by financial barriers, most commonly the lack of a public or private source of reimbursement for needed services. The 1990 Rhode Island HIS collected information on each participant's coverage by governmental health programs and private health insurance plans, as well as whether any private plans were paid for principally by an employer.

Uninsured

Minorities have substantially higher percentages of individuals who are without health insurance than White non-Hispanics; White Hispanics have the highest rate (24%) of non-insured individuals of any group (Tables I1 and I2). With the exception of Black females, 23% of whom are uninsured, males are more likely to be uninsured than females within each race/ethnicity category.

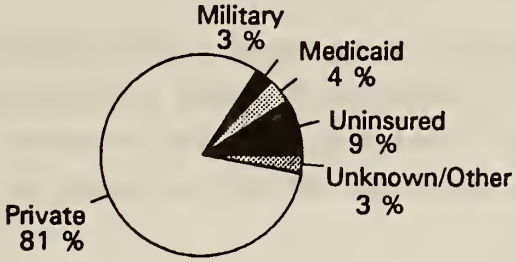
Principal Source of Health Insurance Coverage

Ninety-nine percent of individuals 65 and older have health insurance and 91% report Medicare as their primary source of coverage (Table I3). Medicare coverage is highest among White non-Hispanics (92%). Blacks reported the lowest rate of Medicare coverage (77%). Because the sample sizes for minority members 65 and older are quite small, these results may be substantially affected by random variation.

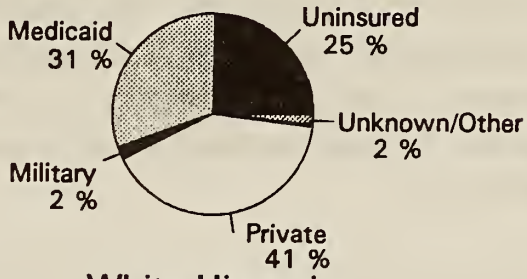
For Rhode Islanders under the age of 65, private coverage (i.e., including Blue Cross/Blue Shield, health maintenance organizations such as Harvard Community Health Plan and Ocean State Physicians Health Plan, and commercial insurers such as Prudential and Metropolitan) is the most important single type of coverage for all groups. Most White non-Hispanics (81%) are covered by private health insurance, compared with 49% or less for other groups (Table I4 and Figure 25). Medical Assistance, or Medicaid, is the second most important source of coverage for minority groups.

Private coverage is paid for by employers for almost all of those under 65 who have such coverage (Table I5). Persons of Other Races are the only group with a substantially smaller percentage (62%) of employer paid private coverage.

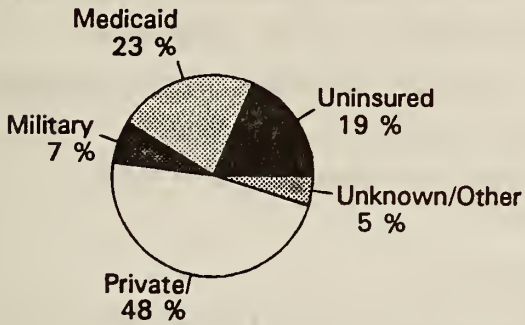
Figure 25. Source of Primary Health Insurance for Those Age 0-64 Years, Rhode Island, 1990



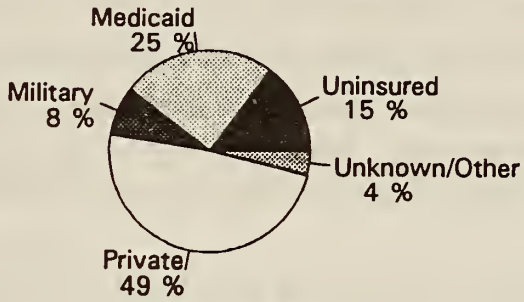
White Non-Hispanic



White Hispanic



Black



Other Races

Conclusion

This report has utilized the major sources of data on the health of the population of Rhode Island to document the extent of the disparities in health experienced by members of the state's minority populations. These disparities are prominent whether the area examined is health status, health risk behavior, or access to health care.

Among the findings of this report, several patterns stand out. Black residents experience higher mortality rates for nine of the ten leading causes of death in the state. Black and Asian mothers and infants are most likely to suffer from inadequate prenatal care, low birth weight, and infant mortality. Black teenagers have higher rates of live births and induced abortions than their White counterparts. Morbidity from AIDS, tuberculosis, and hepatitis B, is most common among members of minority groups.

Minority populations are placed at higher risk of poor health by some patterns of behavior related to long-term health. Blacks and Hispanics are more likely to smoke cigarettes and less likely to quit smoking than other Rhode Islanders. Smoking rates are especially elevated for Black and Hispanic females. Rhode Island's Black and Hispanic populations are also at highest risk for the health problems associated with being overweight. Finally, Black and Hispanic women are least likely to have been screened for breast cancer by having a mammogram within the past two years.

Restricted access to health care also appears to place minority groups at a disadvantage. All minority children are less likely than White, non-Hispanic children to have had a preventive dental visit within the past year. The proportions of minority group members without coverage for health care costs are much higher than for the White, non-Hispanic group, and more minority residents are covered by government programs where the participation of providers may be limited.

In summary, Rhode Island's minority groups face excess morbidity, mortality, and disability and often have limited access to medical treatment when needed, especially to preventive care. Reducing these disparities represents a major challenge to Rhode Island's public health and health care systems.

THE HEALTH
OF MINORITIES
IN RHODE ISLAND

APPENDIX:
DETAILED TABLES

LIST OF TABLES

Health Status

Health Risk Behaviors

Use of Health Care Providers

Coverage by Health Insurance

Table P1: Population by Detailed Race, Rhode Island, 1990

Race	Population Number	Percent*
White	917,375	91.4
Black	38,861	3.9
American Indian, Eskimo, or Aleut	4,071	0.4
American Indian	3,987	0.4
Eskimo	42	0.0
Aleut	42	0.0
Asian or Pacific Islander	18,325	1.8
Chinese	3,170	0.3
Filipino	1,836	0.2
Japanese	750	0.1
Asian Indian	1,975	0.2
Korean	1,294	0.1
Vietnamese	772	0.1
Cambodian	3,655	0.4
Hmong	884	0.1
Laotian	2,579	0.3
Thai	141	0.0
Other Asian	963	0.1
Hawaiian	112	0.0
Samoan	20	0.0
Other Polynesian	2	0.0
Guamanian	134	0.0
Other Mirconesian	3	0.0
Melanesian	25	0.0
Other Pacific Islander	10	0.0
Other Race	24,832	2.5
Total	1,003,464	100.0

*An entry of 0.0 indicates a percentage of less than 0.05.

Source: 1990 United States Census for Rhode Island

Table P2. Population by Detailed Ethnicity (Hispanic Origin), Rhode Island, 1990

Ethnicity	Population Number	Percent
Hispanic Origin	45,752	4.6
Mexican	2,437	0.2
Puerto Rican	13,016	1.3
Cuban	840	0.1
Other Hispanic	29,459	2.9
Not of Hispanic Origin	957,712	95.4
Total	1,003,464	100.0

Source: 1990 United States Census for Rhode Island

Table P3: Population by Race and Ethnicity (Hispanic Origin), Rhode Island, 1990

Ethnicity/Race	Population Number	Percent*
Hispanic Origin	45,752	4.6
White	21,266	2.1
Black	4,578	0.5
American Indian, Eskimo, or Aleut	442	0.0
Asian or Pacific Islander	741	0.1
Other Race	18,725	1.9
Not of Hispanic Origin	957,712	95.4
White	896,109	89.3
Black	34,283	3.4
American Indian, Eskimo, or Aleut	3,629	0.4
Asian or Pacific Islander	17,584	1.8
Other Race	6,107	0.6
Total	1,003,464	100.0

*An entry of 0.0 indicates a percentage of less than 0.05.

Source: 1990 United States Census for Rhode Island

Table P4: Population by Race, Ethnicity, United States and Rhode Island, 1990

Race/Ethnicity	Percentage of Population United States	Rhode Island
Race		
White	80.3	91.4
Black	12.1	3.9
American Indian, Eskimo, and Aleut	0.8	0.4
Asian and Pacific Islander	2.9	1.8
Other Race	3.9	2.5
Ethnicity		
Hispanic Origin	9.2	4.6
Not of Hispanic Origin	90.8	95.4

Source: 1990 United States Census for Rhode Island

Table P5: Population Change by Race and Ethnicity, Rhode Island, 1980-1990

Race/Ethnicity	Population 1980	1990	Percent Increase
Race			
White	896,692	917,375	+2.3
Black	27,584	38,861	+40.9
American Indian, Eskimo, Aleut	2,898	4,071	+40.5
Asian and Pacific Islander	5,303	18,325	+245.6
Other Race	14,677	24,832	+89.6
Ethnicity			
Hispanic Origin	19,707	45,752	+132.2
Not of Hispanic Origin	927,447	957,712	+3.3
Total	947,154	1,003,464	+5.9

Source: 1990 United States Census for Rhode Island

Table P6. Distribution of Minority Group Populations by City/Town, Rhode Island, 1990

City or Town	Black Number	Rank*	American Indian Eskimo, Aleut Number	Rank*	Asian, Pacific Islander Number	Rank*	Hispanic Origin Number	Rank*
Central Falls	744	8	47	--	136	--	5,119	3
Cranston	1,837	5	139	8	1,348	2	1,532	4
East Providence	2,137	4	241	3	294	10	845	6t
Middletown	895	7	63	--	410	7	531	10
Newport	2,281	3	210	4	399	8	789	8
North Providence	334	--	33	--	378	9	571	--
Pawtucket	2,608	2	203	5	472	6	5,211	2
Providence	23,828	1	1,495	1	9,547	1	24,982	1
South Kingstown	362	10	451	2	735	4	306	--
Warwick	673	9	183	6	713	5	845	6t
West Warwick	235	--	53	--	281	--	542	9
Woonsocket	1,158	6	77	--	1,309	3	1,156	5
All Other	1,769	NA	876	NA	2,303	NA	3,323	NA
Total	38,861	NA	4,071	NA	18,325	NA	45,752	NA

*Rank among top ten cities and towns by number (t = tie). Additional towns with large numbers of persons of American Indian, Eskimo, or Aleut race are Narragansett (141, rank 7), North Kingstown (106, rank 9), and Charlestown (103, rank 10).

Source: 1990 United States Census for Rhode Island

Table M1: Black/White Ratios of Age-Adjusted Mortality Rates for the Ten Leading Causes of Death, by Sex, Rhode Island, 1984-88

Cause of Death	Male	Female	Both
Heart Disease	1.18	1.34	1.26
Cancer	1.29	1.15	1.23
Stroke	1.20	2.00	1.64
COPD	1.37	0.56	1.10
Unintentional Injuries	1.43	1.42	1.45
Diabetes	4.02	2.92	3.45
Pneumonia and Influenza	1.32	1.08	1.20
Liver Disease	0.83	2.31	1.41
Suicide	0.93	0.33	0.76
Homicide	8.31	2.79	6.32
All Other Causes	1.82	1.91	1.88
All Causes	1.41	1.46	1.45

Source: Rhode Island Vital Statistics.

Table M2: Age-Adjusted Mortality Rates for Selected Causes of Death, by Sex and Race (Black, White), with Black/White Mortality Ratios, Rhode Island 1984-88 and United States, 1986

Cause/Sex	Rhode Island, 1984-88 White	Black	Ratio	United States, 1986 White	Black	Ratio
Heart Disease						
Male	342.7	404.3	1.18	339.3	392.7	1.16
Female	184.7	247.0	1.34	190.4	262.5	1.38
Cancer						
Male	234.6	302.7	1.29	210.9	296.0	1.40
Female	149.7	172.0	1.15	138.7	161.9	1.17
Stroke						
Male	45.5	54.8	1.20	49.4	80.3	1.63
Female	37.6	75.3	2.00	44.4	67.5	1.52
Suicide						
Male	15.2	14.1	0.93	20.5	10.7	0.52
Female	4.6	1.5	0.33	5.3	2.2	0.42
Homicide						
Male	4.5	37.4	8.31	7.7	50.3	6.53
Female	2.4	6.7	2.79	2.8	10.9	3.89
All Causes						
Male	920.3	1299.5	1.41	924.8	1276.0	1.38
Female	534.7	778.6	1.46	551.5	767.9	1.39

Sources: Rhode Island Vital Statistics; National Center for Health Statistics (unpublished data).

Table N1. Infant Mortality Rate by Race, Rhode Island, 1984-88.

Race	Deaths per 1,000 Live Births
White	8.3
Black	15.5
Asian	9.6
Other	6.1
All Races	8.8

Source: Rhode Island Vital Statistics

Table N2. Infant Mortality Rate by Race, Rhode Island and United States, 1977-79, 1982-84, and 1987-89.

Race/Area	Deaths per 1,000 Live Births 1977-79	1982-84	1987-89
White			
Rhode Island	11.9	9.8	8.4
United States	11.8	9.6	8.3
Black			
Rhode Island	36.1	20.7	15.9
United States	23.6	19.9	18.6
All Races			
Rhode Island	13.3	10.5	8.9
United States	13.6	11.2	9.9

Sources: Rhode Island Vital Statistics
National Center for Health Statistics.

Table N3. Neonatal Mortality Rate by Race, Rhode Island and United States, 1977-79, 1982-84, and 1987-89.

Race/Area	Deaths per 1,000 Live Births 1977-79	1982-84	1987-89
White			
Rhode Island	8.9	7.6	6.2
United States	8.2	6.4	5.3
Black			
Rhode Island	22.5	14.2	11.7
United States	15.8	13.0	12.1
All Races			
Rhode Island	9.7	8.0	6.7
United States	9.4	7.3	6.3

Sources: Rhode Island Vital Statistics
National Center for Health Statistics.

Table N4. Post-Neonatal Mortality Rate by Race, Rhode Island and United States, 1977-79, 1982-84, and 1987-89.

Race/Area	Deaths per 1,000 Live Births 1977-79	1982-84	1987-89
White			
Rhode Island	3.0	2.3	2.2
United States	3.5	3.3	3.0
Black			
Rhode Island	N.A.	6.5	4.2
United States	7.8	6.9	6.5
All Races			
Rhode Island	3.6	2.5	2.3
United States	4.2	3.8	3.6

Sources: Rhode Island Vital Statistics
National Center for Health Statistics.

Table N5. Percentage of Low Birth Weight Births and of Very Low Birth Weight Births by Race, Rhode Island, 1984-88.

Race	Low Birth Weight	Very Low Birth Weight
White	5.7	1.0
Black	11.2	2.4
Asian	6.6	0.9
Other	9.0	1.1
All Races	6.2	1.1

Low birth weight = less than 2,500 grams.
Very low birth weight = less than 1,500 grams.
Source: Rhode Island Vital Statistics

Table N6. Percentage of Low Birth Weight Births by Race, Rhode Island, 1984-88, and United States, 1989.

Race	Percent Low Birth Weight	
	Rhode Island 1984-88	United States 1989
White	5.7	5.7
Black	11.2	13.5
Asian	6.6	6.5
Other	9.0	6.3*
All Races	6.2	7.1

Low birth weight = less than 2,500 grams.
*American Indian, Eskimo, Aleut only
Sources: Rhode Island Vital Statistics
National Center for Health Statistics.

Table N7. Start of Prenatal Care by Race, Rhode Island, 1984-88.

Race	Prenatal Care Began (%) First Trimester	Third Trimester/None
White	86.0	2.1
Black	66.7	7.1
Asian	59.1	7.7
Other	56.0	5.4
All Races	83.8	2.6

Source: Rhode Island Vital Statistics.

Table N8. Start of Prenatal Care by Race, Rhode Island, 1984-88, and United States, 1989.

Race	Prenatal Care Began Third Trimester, or No Care (%) Rhode Island	United States
White	2.1	5.2
Black	7.1	11.9
Asian	7.7	6.1
Other	5.4	13.4*
All Races	2.6	6.4

*American Indian, Eskimo, Aleut only
Sources: Rhode Island Vital Statistics
National Center for Health Statistics.

Table N9. Birth Rate and Pregnancy Rate, Women Ages 15-19 Years, Rhode Island, 1984-88.

Race	Per 1,000 Women Age 15-19 Live Births	Total Pregnancies
White	36.4	79.1
Black	105.6	181.1
Asian	35.3	56.1
Other	15.0	56.9
All Races	38.9	82.5

Source: Rhode Island Vital Statistics.

Table N10. Induced Abortions per 100 Live Births, All Women and Women Ages 15-19 Years, by Race, Rhode Island, 1984-88.

Race	Abortions per 100 Births All Women	Women Age 15-19
White	40.9	106.0
Black	65.2	63.4
Asian	39.9	52.9
Other	87.9	92.2
All Races	43.0	98.7

Source: Rhode Island Vital Statistics.

Table D1. Reported Cases of Sexually Transmitted Diseases by Year of Diagnosis, Race, and Ethnicity, Rhode Island, 1990-1991.

Race/Ethnicity	Chlamydia 1990	Chlamydia 1991	Gonorrhea 1990	Gonorrhea 1991	Syphilis 1990	Syphilis 1991	Other STDs 1990	Other STDs 1991
White, non-Hispanic	739	620	376	398	36	56	16	18
White Hispanic	165	192	160	203	76	109	1	4
Black	205	232	540	401	56	63	7	6
Asian	17	25	15	16	8	10	0	0
Native American	4	3	2	0	0	0	1	0
Other/Unknown	1155	1033	198	162	0	3	2	11
Total	2285	2105	1291	1180	176	241	27	39

Source: Rhode Island Department of Health, Division of Disease Control.

Table D2. Reported Cases of HIV Infection by Year of Diagnosis, Race, and Ethnicity, Rhode Island, 1990-1991

Race/Ethnicity	1990	1991
White, non-Hispanic	291	214
White Hispanic	95	97
Black	174	126
Native American	7	3
Other/Unknown	17	13
Total	584	453

Source: Rhode Island Department of Health, Division of Disease Control.

Table D3. Reported Cases of AIDS by Year of Diagnosis, Race, and Ethnicity, Rhode Island, 1990-1991

Race/Ethnicity	1987	1988	1989	1990	1991	Total
White, non-Hispanic	65	44	57	63	65	294
White Hispanic	4	8	11	10	11	44
Black	19	19	21	18	21	98
Asian	0	0	0	1	1	2
Native American	0	0	1	0	1	2
Total	88	71	90	92	99	440

Source: Rhode Island Department of Health, Division of Disease Control.

Table D4. Percentage Distribution of Reported Cases of Tuberculosis by Race and Ethnicity, Percentage of Cases Foreign Born, and Mean Cases per Year, Rhode Island, 1985-1989 and 1990-1991.

Race/Ethnicity	1985-1989	1990-1991
White, non-Hispanic	59%	41%
White Hispanic	10%	15%
Black	12%	21%
Asian	19%	23%
Total	100%	100%
Foreign-born	48%	53%
Mean cases per year	51	73

Source: Rhode Island Department of Health, Division of Disease Control

Table D5. Percentage Distribution of Reported Cases of Hepatitis B by Race and Ethnicity, Rhode Island, 1987-1991 (N = 326)

Race/Ethnicity	Percentage
White, non-Hispanic	51%
White Hispanic	5%
Black	8%
Asian	4%
Other/Unknown	32%
Total	100%

Source: Rhode Island Department of Health, Division of Disease Control.

Table S1. Percentage Distribution of Reported General Health Status by Race/Ethnicity, Ages 18 Years and Older, Rhode Island, 1990.

Race/Ethnicity	Fair or Poor	Good	Very Good	Excel-lent
White, non-Hispanic	17.0	37.6	19.0	26.4
White Hispanic	41.1	36.9	13.2	8.9
Black	23.5	39.3	17.0	20.2
Other Races	44.7	18.0	18.5	18.8
All Races	18.6	37.2	18.7	25.5

Source: Rhode Island Health Interview Survey.

Table S2. Percentage Reporting Having Diabetes or High Blood Sugar, by Race/Ethnicity, Ages 18 Years and Older, Rhode Island, 1990.

Race/Ethnicity	Percentage
White, non-Hispanic	6.2
White Hispanic	6.8
Black	8.9
Other Races	5.8
All Races	6.3

Source: Rhode Island Health Interview Survey.

Table S3. Percentage Reporting Having High Blood Pressure (HBP) and Percentage with HBP under Control, by Race/Ethnicity, Ages 18 Years and Older, Rhode Island, 1990.

Race/Ethnicity	Percentage Ever Had HBP	Percentage* HBP Under Control
White, non-Hispanic	18.9	90.4
White Hispanic	17.0	74.7
Black	22.5	82.0
Other Races	18.6	100.0
All Races	19.0	89.7

*Percentage based on those with condition.
Source: Rhode Island Health Interview Survey.

Table S4. Percentage Reporting Having High Cholesterol and Percentage with Cholesterol Controlled, by Race/ Ethnicity, Ages 18 Years and Older, Rhode Island, 1990.

Race/Ethnicity	Percentage Ever Had High Chol.	Percentage* Cholesterol Controlled
White, non-Hispanic	16.6	46.8
White Hispanic	11.0	42.1
Black	9.0	54.7
Other Races	14.5	24.6
All Races	16.2	46.3

*Percentage based on those with condition.
Source: Rhode Island Health Interview Survey.

Table S5. Percentage Reporting Having Miscellaneous Conditions in Past Twelve Months, by Race/Ethnicity, Ages 18 Years and Older, Rhode Island, 1990.

Race/Ethnicity	Percentage Treated for Emotional Illness	Percentage Treated for One or More Injuries
White, non-Hispanic	4.3	7.8
White Hispanic	4.8	10.2
Black	3.1	8.3
Other Races	7.6	4.7
All Races	4.3	7.8

Source: Rhode Island Health Interview Survey.

Table B1. Percentage Distribution of Smoking Status by Race/Ethnicity, Ages 18 Years and Older, Rhode Island, 1990.

	Current Smoker	Former Smoker	Non-Smoker
White, non-Hispanic	25	26	50
White Hispanic	27	18	56
Black	29	20	51
Other Races	13	16	70
All Races	25	25	51

Source: Rhode Island Health Interview Survey.

Table B2. Percentage Distribution of Smoking Status by Sex and Race/Ethnicity, Ages 18 Years and Older, Rhode Island, 1990.

	Current Smoker	Former Smoker	Non-Smoker
White, non-Hispanic			
Male	25	29	45
Female	24	22	54
White Hispanic			
Male	26	35	39
Female	27	7	66
Black			
Male	25	24	51
Female	31	17	51
Other Races			
Male	23	25	52
Female	6	9	84
All Races			
Male	26	29	45
Female	24	21	55

Source: Rhode Island Halth Interview Survey.

Table B3. Percentage Distribution of Alcohol Consumption Status by Race/Ethnicity, Ages 18 Years and Older, Rhode Island, 1990.

	Non Drinker	Former Drinker	2-week Abstainer	Light Drinker	Moderate Drinker	Heavy Drinker
White, non-Hispanic	32	6	13	29	16	4
White Hispanic	55	8	14	11	7	4
Black	50	7	9	23	8	3
Other Races	65	3	7	13	10	2
All Races	34	6	13	28	16	4

Source: Rhode Island Health Interview Survey.

Table B4. Percentage Distribution of Alcohol Consumption Status by Sex and Race/Ethnicity, Ages 18 Years and Older, Rhode Island, 1990

	Non Drinker	Former Drinker	2-Week Abstainer	Light Drinker	Moderate Drinker	Heavy Drinker
White, non-Hispanic						
Male	22	7	11	29	23	8
Female	41	5	14	29	11	1
White Hispanic						
Male	41	9	19	8	13	11
Female	64	7	12	13	4	0
Black						
Male	35	6	8	29	15	7
Female	60	8	10	18	4	1
Other Races						
Male	64	1	1	13	14	6
Female	66	3	12	12	7	0
All Races						
Male	24	7	11	28	22	8
Female	43	5	14	27	10	1

Source: Rhode Island Health Interview Survey.

Table B5. Percentage Overweight* by Sex and Race/Ethnicity, Ages 18 Years and Older, Rhode Island, 1990.

	Males	Females	Both Sexes
White, non-Hispanic	21.0	18.0	19.5
White Hispanic	18.9	30.8	26.3
Black	27.4	28.6	28.1
Other Races	11.7	16.1	14.3
All Races	21.0	18.8	19.8

* An individual is determined to be overweight if his or her Body Mass Index (BMI, calculated as weight in kilograms divided by the square of height in meters) equals or surpasses the age-sex specific cutoffs used with the Year 2000 National Health Objectives. These cutoffs are: for males ages 18-19, BMI $\geq$ 25.8, for males ages 20+, BMI $\geq$ 27.8; for females ages 18-19, BMI $\geq$ 25.7, for females ages 20+ BMI $\geq$ 27.3.

Source: Rhode Island Health Interview Survey.

Table B6. Percentage Wearing Safety Belt or Child Safety Seat All or Most of the Time Riding in an Automobile, by Race/Ethnicity, All Ages, Rhode Island, 1990.

Race/Ethnicity	Percentage
White, non-Hispanic	57.5
White Hispanic	54.7
Black	54.9
Other Races	72.0
All Races	57.6

Source: Rhode Island Health Interview Survey.

Table B7. Time Since Last Clinical Breast Exam, by Race/Ethnicity, Women Ages 40 Years and Older, Rhode Island, 1990.

	Never	2 Years or Less	Over 2 Years
White, non-Hispanic	45	86	9
White Hispanic	3	86	12
Black	3	77	19
Other Races	7	87	7
All Races	5	85	10

Source: Rhode Island Health Interview Survey.

Table B8. Time Since Last Mammogram, by Race/Ethnicity, Women Ages 40 Years and Older, Rhode Island, 1990.

Race/Ethnicity	Never	2 Years or Less	Over 2 Years
White, non-Hispanic	21	72	7
White Hispanic	25	64	11
Black	33	60	7
Other Races	20	73	8
All Races	21	72	7

Source: Rhode Island Health Interview Survey.

Table B9. Time Since Last Pap Smear, by Race/Ethnicity, Women Ages 14 Years and Older, Rhode Island, 1990.

Race/Ethnicity	Never	2 Years or Less	Over 2 Years
White, non-Hispanic	7.2	84.6	8.2
White Hispanic	8.2	88.6	3.2
Black	11.4	79.2	9.4
Other Races	18.8	78.4	2.8
All Races	7.7	84.4	7.9

Source: Rhode Island Health Interview Survey.

Table U1. Time of Last Dentist Visit and Dental Check-up in Past Year, by Race/Ethnicity, Ages 5 - 17 Years, Rhode Island, 1990.

Race/Ethnicity	Never	One Year or Less	Over One Year	Check-Up*
White, non-Hispanic	1.3	94.4	4.3	97.2
White Hispanic	2.5	84.8	12.7	87.8
Black	9.1	79.0	11.9	94.3
Other Races	27.1	49.8	23.1	100.0
All Races	3.1	90.7	6.2	96.5

* Percentage based on persons with any visits in past year.
Source: Rhode Island Health Interview Survey.

Table U2. Time of Last Dentist Visit and Dental Check-up in Past Year, by Race/Ethnicity, Ages 18 Years and Older, Rhode Island, 1990.

Race/Ethnicity	Never	One Year or Less	Over One Year	Check-Up*
White, non-Hispanic	0.1	75.8	24.1	91.4
White Hispanic	6.0	67.1	26.9	82.3
Black	5.3	60.7	34.0	74.3
Other Races	10.4	70.6	19.0	85.2
All Races	0.7	75.0	24.3	90.7

* Percentage based on persons with any visits in past year.
Source: Rhode Island Health Interview Survey.

Table U3. Physician Visits in Past 12 Months: Percentage with Any Visits by Age, Sex, and Race/Ethnicity, and Mean Number of Visits by Race/Ethnicity, Rhode Island, 1990.

Race/Ethnicity	Percentage with Any Visits Ages 0-17	Age 18+	All Ages	Mean No. of Visits
White, non-Hispanic				
Male	90	74	--	--
Female	88	88	--	--
Both Sexes	89	82	83	4.4
White Hispanic				
Male	74	68	--	--
Female	75	85	--	--
Both Sexes	74	78	77	5.1
Black				
Male	98	74	--	--
Female	90	81	--	--
Both Sexes	94	78	84	4.4
Other Races				
Male	69	66	--	--
Female	52	88	--	--
Both Sexes	62	79	73	4.1
All Races				
Male	88	74	--	--
Female	86	88	--	--
Both Sexes	62	79	73	4.1

Source: Rhode Island Health Interview Survey.

Table U4. Percentage Having a Usual Source of Health Care, by Race/Ethnicity, Rhode Island, 1990.

Race/Ethnicity	Percentage
White, non-Hispanic	89.2
White Hispanic	86.9
Black	90.7
Other Races	91.5
All Races	89.2

Source: Rhode Island Health Interview Survey.

Table U5. Percentage Distribution of Usual Source of Health Care, by Race/Ethnicity, Rhode Island, 1990

Race/Ethnicity	None	Work Clinic	Hlth Ctr	Hosp OutP	Hosp ER	HMO	Priv Phys	Walk-in/ Other
White, non-Hispanic	11	2	5	6	2	6	66	3
White Hispanic	13	3	23	14	4	5	39	<1
Black	9	5	20	22	4	10	29	1
Other Races	9	13	22	12	1	8	35	<1
All Races	11	3	7	7	2	6	62	2

Source: Rhode Island Health Interview Survey.

Table I1. Percentage with No Health Insurance Coverage, by Race/Ethnicity, Ages 0 - 64 Years and Ages 65 Years and Older, Rhode Island, 1990.

Race/Ethnicity	Under Age 65	Age 65 & Older	All Ages
White, non-Hispanic	9.0	1.1	7.9
White Hispanic	25.3	0.0	24.3
Black	18.8	0.0	17.9
Other	14.5	0.0	12.8
All Races	10.3	1.1	9.0

Source: Rhode Island Health Interview Survey.

Table I2. Percentage with No Health Insurance Coverage, by Sex and Race/Ethnicity, Ages 0 - 64 Years, Rhode Island, 1990.

Race/Ethnicity	Males	Females
White, Non-Hispanic	10.6	7.5
White Hispanic	28.3	22.9
Black	13.6	23.0
All Other	18.3	10.6
All Races	11.7	9.0

Source: Rhode Island Health Interview Survey.

Table 13. Percentage with Medicare, by Race/Ethnicity, Ages 65 Years and Older, Rhode Island, 1990.

Race/Ethnicity	Percentage
White, non-Hispanic	91.5
White Hispanic	91.5
Black	76.9
Other	86.6
All Races	91.2

Source: Rhode Island Health Interview Survey.

Table 14. Percentage Distribution of Primary Health Insurance Coverage, by Race/Ethnicity, Ages 0 - 64 Years, Rhode Island, 1990.

Race/Ethnicity	Uninsured	Medicaid	Military	Private	Other/ Don't Know
White, non-Hispanic	9.1	3.8	3.2	81.0	3.1
White Hispanic	25.3	30.7	1.5	40.7	1.8
Black	18.8	22.8	6.5	47.5	3.4
All Other	14.5	24.5	7.6	49.4	4.0
All Races	10.3	6.4	3.4	76.7	3.2

Source: Rhode Island Health Interview Survey.

Table 15. Percentage with Private Health Insurance Whose Insurance Is Paid by Employer, by Race/Ethnicity, Ages 0 - 64 Years, Rhode Island, 1990.

Race/Ethnicity	Percentage
White, non-Hispanic	85.0
White Hispanic	87.0
Black	96.0
Other	62.0
All Races	83.0

Source: Rhode Island Health Interview Survey.